

*Tasmanian Year Book*



1984

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**TASMANIAN YEAR BOOK**  
**1984**

*Frontispiece:*

*Mt Byron from Narcissus*  
[Copyright Elizabeth Holloway]







**AUSTRALIAN BUREAU OF STATISTICS  
TASMANIAN OFFICE**



# **TASMANIAN YEAR BOOK**

**No. 18: 1984**

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DEPUTY COMMONWEALTH STATISTICIAN  
AND GOVERNMENT STATISTICIAN OF TASMANIA**

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## SYMBOLS AND OTHER USAGES

The following symbols, where used, mean:

ASIC	Australian Standard Industrial Classification
n.a.	not available
n.e.c.	not elsewhere classified
n.e.i.	not elsewhere included
n.p.	not available for separate publication but included in totals where applicable
n.y.a.	not yet available
p	preliminary—figure or series subject to revision
r	figure or series revised since previous issue
..	not applicable
-	nil or rounded to zero
---	break in continuity of the series (where drawn across a column between two consecutive figures)
(H)	located in Hobart Statistical Division
(S)	located in Southern Statistical Division
(H) (S)	parts in both Divisions.

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Where reference is made to Acts of the Federal or State Parliaments, the year quoted refers to the year in which the principal Act was passed; all subsequent amendments are inferred.

## VALUES AND MEASURES

Values are shown in Australian dollars (\$) and/or cents (¢). Metric units have been substituted for imperial units. The use of dollar currency and metric units has not been confined merely to tables; for the sake of uniformity, they have also been introduced into historical texts.

## LOCAL NAMES OF CERTAIN REGIONS

Tasmanians describe certain regions in a manner confusing to strangers; nevertheless this book employs local usage in most contexts. The chief peculiarities are:

*North-West Coast*: The *north* coast from approximately Port Sorell, west to Cape Grim is called the *North-West Coast*.

*North-East Coast*: The *north* coast from approximately Low Head, east to Cape Portland is called the *North-East Coast*. With most of the north coast referred to as either 'north-west' or 'north-east', the term 'north' is rarely applied to this coastal region.

*West Coast*: The Tasmanian *West Coast* may also refer only to the mining settlements of Queenstown, Rosebery, etc. In other contexts, the user may be thinking of inland mountains and rainforests rather than of a coastline.

*Midlands*: The true *Midlands* are probably the Central Plateau but the Tasmanian term means the rural area east of the Plateau and lying along the axis of the Hobart-Launceston road (the *Midland Highway*).

## PREFACE

The *Tasmanian Year Book* is designed to present a comprehensive statistical and descriptive account of the physical environment and of the social, demographic and economic structure of the State, with particular emphasis on change and development in more recent years. In providing a general description of Tasmania, the *Year Book* includes authoritative information on almost every aspect of life in the State. The text and tables are supplemented by numerous maps, graphs and diagrams.

This edition of the *Year Book* (the eighteenth) includes a special article by Mr Colin Winkler on the referendum in northern Tasmania which proposed an amalgamation of sections of four municipalities to create an enlarged City of Launceston. There is also an article by Mr Harry Melling on Tasmania's radiocommunication network and an article on shipbuilding in Tasmania.

An index of special articles precedes the General Index and covers all such articles included in this and previous issues of the *Year Book*.

As far as possible, the latest available statistics and significant developments which occurred during 1982 have been embodied in each chapter.

The *Year Book* has been compiled under the direction of Mr R. S. White, J.P., B.A., M.A.C.S. and Mr C. C. Johnston, B.A. Mr B. Austen, M.A. and Mrs Jean Kelleher were responsible for compiling and editing this issue.

I gratefully acknowledge the valuable assistance given by officers of the various Federal and State Government Departments and instrumentalities and by others who have contributed information. I also express my appreciation to Valentine Photocomposition Services and Valentine Graphics for their co-operation and enthusiasm in producing this *Year Book*.

Special thanks are due to the Commonwealth, State and local government authorities, private organisations, farmers and graziers and others who have supplied the basic data from which the statistics of the State have been compiled.

More detailed, and in many cases more up-to-date, statistics relating to most matters treated in the *Year Book* are available in the other statistical publications issued by the ABS. Information about ABS publications relating to Tasmania is provided in the section 'Publication of Tasmanian Statistics' which precedes the Index of Special Articles. In addition, unpublished statistics may be available on request. At the end of each chapter, a list of 'Further References' relevant to the subject matter of the chapter is included.

The Tasmanian Office provides an Information Service which, on request, supplies available statistical information and publications. All publications of the ABS and other statistical material are included in the Office Library which is open to the public for reference purposes. Businessmen, manufacturers, primary producers, government authorities, students and the public generally are invited to make full use of these services. Anyone requiring advice on what statistics are available or which publications may be of most use to them is invited to telephone the Information Officer on Hobart 20 9409.

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and Government Statistician of Tasmania*

Australian Bureau of Statistics  
HOBART, June 1984

# CHAPTER 1

## HISTORY AND CHRONOLOGY

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## Chapter 1

### HISTORY AND CHRONOLOGY

#### DISCOVERY

##### The Period of Dutch Exploration, 1606-1642

In 1606, Captain William Jansz in the *Duyfken* was sent from Java to explore the islands of New Guinea and, crossing Torres Straits unawares, coasted along the west of Cape York Peninsula; this was the first of a series of voyages by Dutch captains who, in the next 30 years, acquired some knowledge of the western shores of the unknown land. Not all voyages were undertaken with the aim of exploration—Dirk Hartog's long journey along the western shore of Australia in 1616 resulted from his sailing too far east on the route from the Cape of Good Hope to Java. Some later captains on the same route even regarded the western Australian coast as a suitable landfall before turning north for Java—a commentary on the difficulty of navigation when longitude had to be established by dead reckoning.

In 1642, the Dutch East India Company despatched from Java an expedition of two vessels, the *Heemskirk* and *Zeehan*, under Captain Abel Tasman, with instructions to investigate the extent of the unknown land thought to exist between New Guinea and the western coast of Australia. One immediate aim of the Governor-General, Anthony Van Diemen, was to find a southern route from Java to Chile so that ships of the Company could either trade or plunder along the Pacific coast of South America; a question to be resolved was whether any land mass extending far south blocked such a route.

The original plan was to sail west to Mauritius, to run down to 52° or 54° south latitude and then to proceed east; assuming no land was discovered, it was then intended to turn north in either the longitude of eastern New Guinea or possibly of the Solomons. If Tasman had followed this plan in every detail he might have discovered the east coast of Australia, anticipating Cook's work by more than a century. As it turned out, the extreme southern latitudes were too hostile and accordingly Tasman was sailing east in latitude 42° south when he sighted the mountainous west coast of Tasmania on 24 November 1642.

The Dutch navigator skirted the south coast and made a landing on the east coast for water in Blackman Bay (from an anchorage south of Marion Bay). He then sailed north to St. Patricks Head, crossed the Tasman Sea and discovered New Zealand, returning to Java by a route to the north of New Guinea. Tasman had thus performed the feat of circumnavigating Australia in a single voyage without once sighting the Australian continent.

In honour of the Governor-General of the Indies, he named the first discovery Van Diemen's Land, imagining it to be the most southern extension of the Australian continent, an illusion that was only completely dispelled by Bass and Flinders when they circumnavigated the island in 1798. The Dutch did not follow up the discoveries of Tasman or their other explorers because they were interested in establishing trading posts only among peoples with a higher degree of civilisation than the natives of Tasmania or mainland Australia appeared to possess. (Tasman's crew saw no natives in Tasmania but inferred their existence from sounds, cuts in trees and the smoke of fires.)

### The Period of British and French Exploration, 1772-1798

One hundred and thirty years passed before Tasmania was visited again, this time by the French navigator Marion du Fresne in 1772; he virtually repeated Tasman's original landfall, skirted the south coast and came to anchor in the bay that bears his name (Marion). His visit is memorable for the first contact between Europeans and Tasmanians and for the slaying of the first native by gunfire. Du Fresne himself was killed by Maoris in New Zealand on the same voyage.

A year later, Captain Tobias Furneaux in the *Adventure* became separated from Captain Cook in the *Resolution* on the route to New Zealand and made for Tasmania to obtain water. He eventually anchored off Bruny Island in Adventure Bay but mistakenly believed himself to be in the area of Tasman's original landing which was at least 70 kilometres to the north-east. From this original error sprang a confusion in nomenclature which persists to this day (e.g. Frederick Henry Bay, first named in Tasman's record, appears on maps in an area that Tasman did not even see). Furneaux then sought to investigate the possibility of a strait separating Tasmania from the continent recently explored by Cook, but shoals in the islands bearing his name (Furneaux Group) caused him to abandon the project and make for New Zealand.

In 1777, Cook, on his third voyage, used the Adventure Bay anchorage without detecting Furneaux's navigational errors.

The settlement at Port Jackson in N.S.W. in 1788 put Tasmania on a major sailing route, the First Fleet passing south of the island on its way there. To have sailed north of the island would have invited shipwreck on the Australian 'mainland' of which Tasmania was then believed to be part. In the same year, Captain William Bligh put into Adventure Bay with the *Bounty* on his way to Tahiti and to the famous mutiny; he had been on Bruny Island before, as Cook's sailing master.

Captain Cox of the *Mercury* anchored in the Bay known as Cox Bight in 1789, charted some of the south coast and explored the strait between Maria Island and the east coast.

The next visitor (1792) was Admiral Bruny D'Entrecasteaux commanding *Recherche* and *Esperance* and searching for La Perouse who had not been heard of since 1788 when he sailed from Botany Bay. The Admiral sailed north hoping to anchor in Adventure Bay, but a navigational error put his ships too far west with the happy result that he discovered the magnificent channel separating Bruny Island from the Tasmanian mainland and was the first to sail up the River Derwent. Leaving Tasmania, the expedition sailed as far west as Cape Leeuwin in Western Australia when it became imperative to take on water. It is an indication of the lack of knowledge then available that D'Entrecasteaux had to return to Adventure Bay to fill his casks. In the same year, Bligh put into Adventure Bay on his way to obtain breadfruit trees in the Pacific for transplanting in the West Indies.

The year 1794 was notable for the visit of Commodore John Hayes who had sailed from India with the *Duke of Clarence* and the *Duchess*; he explored the Derwent as far as Mt Direction and named Risdon Cove, later to be the site of the first settlement.

### Tasmania an Island

Two voyages followed which established that Tasmania was an island. Surgeon George Bass in a whaleboat left Port Jackson in 1797, rounded Wilsons Promontory and discovered Western Port. The nature of tides and swells encountered told Bass that there was no bay but rather a strait of considerable magnitude. In 1798, Bass and Matthew Flinders were given the sloop *Norfolk* to decide the question for all time and they circumnavigated the island, commencing on a westerly course along the north coast where they discovered the Tamar Estuary.

### Fear of the French

In the original annexation of Australian territory by Cook in 1770, Tasmania was excluded since the southern limit was proclaimed as 38° south latitude. Formal possession

of Tasmania was taken by Governor Phillip on 26 January 1788, when he read his commission to the people of the First Fleet at Sydney Cove. Now that it was established that Tasmania was an island, the authorities both in London and Sydney felt that some steps should be taken to block the French from making any claims to possession. The urgency of doing this was underlined by the arrival in the D'Entrecasteaux Channel of Admiral Baudin with the *Geographe* and *Naturaliste* in 1802. The expedition's navigator, Freycinet, charted Tasman and Forestier Peninsulas and correctly identified the Frederick Henry Bay of the Dutch era. The expedition then called at Port Jackson before sailing south into Bass Strait where it was intercepted at King Island by Lieutenant Robbins in the *Cumberland*. Announcing his intention boldly to the French Admiral, the Lieutenant disembarked his small company and formally annexed the island in the name of King George III. Governor King at Port Jackson who gave Robbins his instructions was not satisfied that merely formal acts of annexation would block the French indefinitely and decided that permanent settlements were required if British sovereignty was to be retained. To this decision can be attributed the settlement at Risdon (1803) and the Hobart and Port Dalrymple settlements of 1804.

### Geography of the Original Landing

Tasman's anchorage was near Visscher Island and the first landing was made by longboats which passed through the narrows into Blackman Bay. The second landing occurred in the south-east of North Bay where a lagoon proved too brackish for filling water casks.

The last landing was made near Tasman Bay where the navigator had hoped to take formal possession of the new land. The surf being too rough to get the longboat ashore, the carpenter swam through the waves, planted the Dutch flag and then fought his way back to the longboat.

## SETTLEMENT

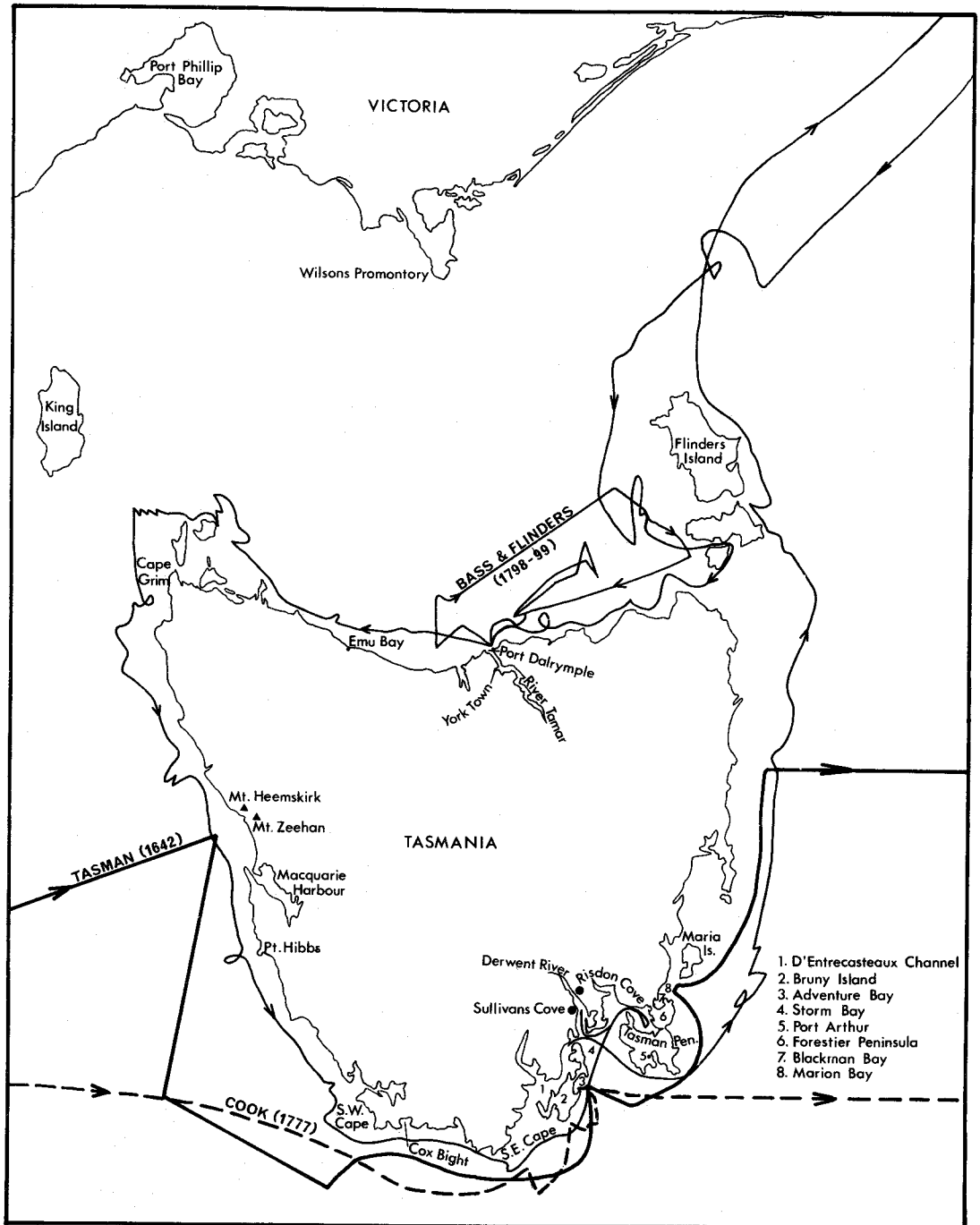
### The First Settlement at Risdon (1803)

The original explorers of the Island (including the French) had very largely concentrated their attention on the south-east and, in particular, on the sea approaches to the Derwent. Faced with the necessity for establishing a settlement to assert British sovereignty, Governor King had a number of possible sites to consider, including King Island, Port Phillip and Port Dalrymple (the Tamar Estuary). His eventual choice was the area of the Derwent Estuary and he reported his intention to the Admiralty as follows:

'My reasons for making this settlement are the necessity there appears of preventing the French gaining a footing on the east side of these islands; to divide the convicts; to secure another place for obtaining timber with any other natural productions that may be discovered and found useful; the advantages that may be expected by raising grain; and to promote the seal fishery.'

Commissioned to make the Derwent settlement, Lieutenant John Bowen sailed from Sydney with the *Albion* and *Lady Nelson*; the two vessels separated in a gale but were anchored at Risdon by 11 September 1803, when Bowen went ashore. The slenderness of Governor King's resources is apparent from the fact that the settlers—free, convict and military—numbered only 49 and that the *Albion* was a British whaler under temporary charter (she caught three sperm whales on the voyage while becalmed).

The responsibility for the choice of the Risdon site attaches ultimately to Bass who had made detailed investigations of the Derwent in 1798 from the *Norfolk*. He had reported as follows: 'The land at the head of Risdon Creek, on the east side, seems preferable to any other on the banks of the Derwent.' It was not surprising, therefore, that Bowen's commission from Governor King directed him to locate the new settlement in the Risdon area. In fact, the site ultimately proved unsuitable due to the inadequate

**TASMANIA: DISCOVERY AND EXPLORATION**

stream and the poor landing place; these handicaps were aggravated by the wretchedness of the human material at Bowen's disposal, a characteristic not altered when the camp was increased to nearly 100 persons.

If the settlement has any claim to fame, it derives from an encounter with natives who descended on the camp on a hunting expedition and who were fired on by the soldiers in a state of panic. Whether the future barbarities of inter-racial war could have been avoided is an open question but this encounter was the first phase of a struggle that ended in the extinction of a race.

The final act of the Risdon settlement was played on 9 August 1804, when the *Ocean* sailed for Port Jackson with Lieutenant Bowen and most of his people; Lieutenant-Governor Collins at the new settlement at Hobart had decided to close down the Risdon camp and held such a low opinion of these early colonists that he retained only 13 convicts and one free settler.

### The Settlement at Hobart (1804)

If Lieutenant-Governor Collins had carried out his original instructions, then Hobart today might have been the name of the capital of Victoria situated on Port Phillip Bay. The British Cabinet, impressed by Governor King's warnings on possible French penetration, decided to carry out the occupation of Port Phillip direct from Britain and, to this end, commissioned Lieutenant-Colonel Collins (Royal Marines) to command an expedition in the *Calcutta* with the *Ocean* as tender to secure the strategic Bass Strait. Control of the Strait meant that the dangerous 1 100 kilometre journey around Van Diemen's Land was avoided and also prevented a hostile foreign power from threatening British sea lanes in the South Pacific.

The settlers eventually arrived, via Rio De Janeiro and the Cape of Good Hope, and formed a temporary camp near the site of the modern Sorrento township. For a variety of reasons, Collins was unhappy about the locality; he considered navigation hazardous, the soil poor and water inadequate. He was unwilling to develop promising land at the head of the bay due to the show of strength by large bands of natives and because of its distance from the open sea. Collins had seen the problems of isolation at Sydney and considered a settlement at the head of Port Phillip Bay unduly hazardous. With the wind in the wrong quarter a ship could be locked in the bay for several days thereby defeating the purpose of the settlement—a port to protect and control Bass Strait. Accordingly he wrote for advice to Governor King in Sydney and was left free to decide between the River Derwent and Port Dalrymple as possible sites for transfer of his command. He was probably swayed in his eventual choice of the River Derwent by its reputation as a safe harbour and the fact that Risdon had already been settled.

On 15 February 1804, Collins, with the first detachment from Port Phillip in the *Lady Nelson* and *Ocean*, anchored off the new settlement at Risdon. A quick inspection satisfied Collins that the site was quite unsuitable and he made his own reconnaissance, eventually selecting the area on the western bank known as Sullivans Cove and ordering that the expedition should be disembarked with all its stores in the vicinity of Hunters Island. In the same month, Collins reported to King that his two ships were 'lying within half a cable-length of the shore in nine fathoms of water'; the Lieutenant-Governor had selected gentle slopes for his settlement, located a fine stream running from Mt Wellington and found near the mouth of the stream depths of water which would accept the draught of any vessel of his day (or of the modern era).

The following table shows the early composition of the settlement at Sullivans Cove (but excludes details of the Risdon Camp):



Number Actualled at Sullivans Cove, 26 February 1804

Quality	Men	Women	Children
Military establishment .....	26	1	—
Civil establishment .....	6	—	—
Settlers .....	13	5	13
Convicts .....	178	9	8
Supernumeraries .....	(a) 3	—	—
Total .....	226	15	21

(a) Includes one Aboriginal from Port Jackson.

The strength of the Colony was increased to 433 persons in June 1804 when the *Ocean* returned from Port Phillip, where it had taken aboard the balance of the original expedition. From the camp on Sullivans Cove has sprung the present city and port of Hobart.

David Collins was no amateur in the field of colonisation—he had sailed with Governor Phillip as Judge Advocate in the First Fleet in 1788 and had acted as Secretary to the Governor till 1796 when he returned to Britain with excellent recommendations.

### The Settlement on the Tamar (1804)

While the Lieutenant-Governor was still in Port Phillip Bay, wondering where best to settle, he sent his namesake, William Collins, on a voyage of exploration to the Tamar Estuary. William Collins followed the river up as far as the Cataract Gorge and returned to Port Phillip with a good account of the possibilities of the Tamar for settlement; in his absence, however, the Lieutenant-Governor had made up his mind and was already preparing for the expedition to the Derwent.

Later Governor King received a despatch from Lord Hobart (Secretary of State for the Colonies) who, by a grotesque error, recommended the establishment of a settlement at Port Dalrymple 'upon the southern coast of Van Diemen's Land and near the eastern entrance of Bass' Straits'. If Lord Hobart really meant 'south' then Collins' move to the Derwent had anticipated his wishes. However, since Collins had in fact left Port Phillip, was it not necessary to re-occupy Port Phillip or possibly to watch the Strait from Port Dalrymple? King knew that Hobart's despatch was written in ignorance of Collins' move and accordingly decided to use his own initiative without raising questions of geography with the Secretary for Colonies.

In Hobart's despatch, Lieutenant-Colonel William Paterson (New South Wales Corps) was nominated as Lieutenant-Governor of the new colony. Paterson set sail with 57 soldiers and convicts in the *Integrity* and the *Contest* but after a month of adverse winds both ships were forced back to Port Jackson. A second attempt was made using *Buffalo*, *Lady Nelson*, *Francis* and *Integrity* and increasing the party to 181. This time the Tamar was successfully entered but H.M.S. *Buffalo* went aground and was, with some difficulty, brought to anchor in Outer Cove (George Town) on 4 November 1804. Lieutenant-Colonel Paterson decided that *Buffalo* must be immediately unloaded and accepted the Outer Cove site as a suitable camp while he undertook a more detailed reconnaissance of the Tamar.

Although he penetrated as far as the fertile site of Launceston, Paterson made the extraordinary decision to set up his headquarters at the head of West Arm and founded York Town, while still maintaining small establishments at Outer Cove, Low Head and Green Island. In deciding on York Town, one can only imagine that Paterson was guided purely by the strategic necessity, as was Collins at Sorrento, of being near to Bass Strait and that he gave little thought to the problem of soil fertility and cultivation.

In March 1806, Paterson was willing to admit that York Town was a most unsuitable site and he accordingly moved his headquarters to the present site of Launceston. Today, York Town and Risdon have one thing in common—the almost complete absence of any indication that settlements ever existed.

Paterson, before setting out on his expedition, had been involved in an argument as to his status, but Governor King had resolved the matter by dividing Tasmania at the 42° parallel and making Collins and Paterson sovereign in their respective halves, but subordinate to him as Governor.

## CHRONOLOGY

### Preface

The following chronology was originally compiled in two sections, the period 1642 to 1929 from a document specially prepared by officers of the State Archives, and the period beginning 1930 from a search of contemporary newspapers by Bureau officers. Greater detail is included in earlier editions of the *Year Book*.

In the record of more recent years, it was found impossible to describe purely Tasmanian events in isolation since certain national events necessarily form part of the history of a state within a federal system; particularly is this true with regard to some Federal Government decisions, the state of the economy and industrial arbitration. On the other hand, there is the difficulty of deciding which events of a purely local character are sufficiently important to warrant inclusion. Some items have been introduced not because they are important but because they have a strong local flavour. This difficulty of selection is partly avoided by giving the record of the most recent years in more detail but inevitably such a policy results in matters of major and minor importance being mingled without distinction. It follows also that the second part of the chronology is limited largely to what the newspapers of the day considered important and that some events of greater significance may have escaped notice.

To round off the picture of any given year, there is a constant temptation to introduce events of world importance; as far as possible, this has been avoided except where such events had considerable local impact. In no way should the record which follows be interpreted as an 'official' chronology of the State; in actual fact, the record derives from two levels of subjective evaluation, firstly, the selection of items of importance by contemporary journalists and, secondly, the further selection of items from this narrowed field by the compilers of the chronology.

### Chronology of Events from First Discovery of Tasmania

- 1642 Abel Janszoon Tasman, commanding *Heemskirk* and *Zeehan*, sighted west coast and named his discovery 'Anthony Van Diemenslandt'. Landings on Forestier Peninsula and near Blackman Bay on east coast.
- 1772 Landing of a party from Du Fresne's expedition at Marion Bay and affray with the Aborigines.
- 1773 Tobias Furneaux in the *Adventure*, became separated from James Cook in *Resolution* and landed a party at Adventure Bay.
- 1777 James Cook anchored *Resolution* in Adventure Bay on third expedition.
- 1788 William Bligh anchored *Bounty* in Adventure Bay on first breadfruit expedition.
- 1789 John Henry Cox sailed *Mercury* from Cox Bight to Maria Island.
- 1792 William Bligh, on second breadfruit voyage, anchored *Providence* in Adventure bay. Bruny D'Entrecasteaux, commanding *La Recherche* and *L'Esperance*, discovered D'Entrecasteaux Channel and charted south-east coast.
- 1793 D'Entrecasteaux returned for further exploration of south-east coast. John Hayes, commanding *Duke of Clarence* expedition, explored Derwent River.
- 1798 Matthew Flinders and George Bass circumnavigated Tasmania.
- 1802 Nicholas Baudin, commanding *Geographe* and *Naturaliste*, explored south-east coast.
- 1803 John Bowen's party of 49 made first settlement at Risdon Cove.
- 1804 David Collins' settlement party landed at Sullivans Cove (Hobart). Aborigines killed in an affray at Risdon. Risdon settlement closed down. William Paterson's settlement party landed at Port Dalrymple (Tamar Estuary).
- 1805 Collins forced by famine to cut rations by one-third.
- 1806 Settlers moved from York Town to Launceston area.
- 1807 Thomas Laycock's party crossed island overland from Port Dalrymple to Hobart. First Norfolk Island settlers shipped to Hobart in *Lady Nelson*.

- 1809 Governor William Bligh aboard *Porpoise* anchored in Derwent after NSW mutiny and embarrassed Collins with problem of jurisdiction.
- 1810 Lieutenant-Governor Collins' death. Issue of newspaper *Derwent Star*.
- 1811 Governor Lachlan Macquarie's first visit to Tasmania.
- 1812 Lieutenant-Governor Thomas Davey arrived. Northern settlement at Port Dalrymple made subordinate to Hobart. *Indefatigable* brought first shipload of convicts direct from England.
- 1815 Hobart and Port Dalrymple declared free ports for import of goods. Davey proclaimed martial law against bushrangers. James Kelly circumnavigated island in a whaleboat.
- 1816 First issue of *Hobart Town Gazette*.
- 1817 Succession of William Sorell as Lieutenant-Governor.
- 1818 Death of Michael Howe, notorious bushranger.
- 1820 Visit by John Thomas Bigge to conduct inquiry into colonial administration.
- 1821 Second tour by Governor Macquarie.
- 1822 Penal settlement established at Macquarie Harbour.
- 1823 Passage of British Act 'for the better administration of justice in NSW and Van Diemen's Land'.
- 1824 Inauguration of Supreme Court, Arrival of Lieutenant-Governor George Arthur.
- 1825 First Launceston newspaper, the *Tasmanian and Port Dalrymple Advertiser*, established. Tasmania constituted a colony independent of NSW Establishment of appointed Executive and Legislative Councils. Departure of Governor Darling from Tasmania left Arthur with the authority of Governor (but not the title).
- 1826 Van Diemen's Land Co. sent first party to select land and establish farming operations. Appointment of Commissioners of Survey and Valuation.
- 1827 Lieutenant-Governor received a petition for trial by jury and some representation in Legislative Council.
- 1828 Passage of British Act 9 Geo. IV, cap. 83 which increased membership of Legislative Council. Martial law proclaimed against Aborigines.
- 1829 First settlement at Emu Bay (Burnie).
- 1830 George Augustus Robinson began his mission to conciliate the Aborigines. First use of juries in civil cases. Beginning of the 'Black Line', the military campaign to round up the Aborigines. Publication of *Quintus Servinton*, first novel to be published in Australia. Port Arthur established as a penal settlement.
- 1831 Approval of British Government's new land regulations discontinuing free grants of land, and replacing them with land sales.
- 1832 First shipment of Aborigines to Straits Islands. Establishment of the Caveat Board to settle land disputes and to confirm titles. Maria Island closed down as a penal settlement.
- 1833 Macquarie Harbour penal settlement closed down.
- 1834 Henty brothers from Launceston became first settlers in Victoria occupying land in Portland Bay area.
- 1835 John Batman sailed from Launceston to Port Phillip as agent for the Port Phillip Association. Tasmania divided into counties and parishes. Opening of Ross Bridge. Population estimated as 40 172 persons.
- 1837 Arrival of Sir John Franklin and assumption of office as Lieutenant-Governor.
- 1838 Sessions of Legislative Council opened to the public.
- 1840 Cessation of transportation to NSW and consequent increase in numbers transported to Tasmania. Population estimated as 45 999 persons.
- 1841 Assignment System of convict discipline replaced by the Probation System. Rossbank Observatory for magnetic and meteorological observations established in Hobart.
- 1842 Tasmania created a separate Anglican diocese. Hobart made a city. Peak year for convict arrivals (5 329).
- 1843 Recall of Sir John Franklin and succession of Sir John Eardley-Wilmot.
- 1844 Transfer of Norfolk Island penal settlement from N.S.W. to Tasmanian control.
- 1845 Resignation of the 'Patriotic Six' members of the Legislative Council, over the drain on colonial revenue for support of Imperial police.
- 1846 Recall of Eardley-Wilmot. Foundation of the Launceston Church Grammar and The Hutchins Schools.
- 1847 Succession of Sir William Denison. The Lieutenant-Governor re-appointed the 'Patriotic Six'.
- 1848 Tasmania now the only place of transportation in the British Empire.
- 1850 Foundation of the Anti-Transportation League. Population estimated as 68 870 persons.
- 1851 British Act provided for limited representative government. First elections for 16 non-appointed members of the Legislative Council.

- 1852 First payable gold found near Fingal. Elections held for first municipal councils in Hobart and Launceston.
- 1853 Arrival of last convicts to be transported. First Van Diemen's Land postage stamp (1d. Blue) issued.
- 1854 Bad floods throughout Colony. Passage of bill establishing responsible government.
- 1855 Succession of Sir Henry Fox Young; title now Governor. British Government approved Constitution Bill.
- 1856 Name of Van Diemen's Land changed to Tasmania. Advent of responsible self-government. Opening of new bi-cameral Parliament with W.T.N. Champ leading first government in the House of Assembly. Re-organisation of Police Department.
- 1858 Council of Education set up. *Rural Municipalities Act* passed.
- 1859 Charles Gould appointed to make geological survey of western Tasmania. Telegraph link established with Victoria.
- 1860 Population estimated as 89 821 persons.
- 1861 Succession of Colonel Thomas Gore Browne. Telegraph cable to Victoria failed.
- 1862 Promotion of scheme for a railway between Launceston and Deloraine.
- 1864 Arrival of first successfully transported salmon and trout ova.
- 1868 Visit by Alfred, Duke of Edinburgh. Primary education made compulsory.
- 1869 Succession of Charles Du Cane. Death of William Lanny, thought to be the last male full-blood Aboriginal. Death of Sir Richard Dry. New telegraph cable laid to Victoria.
- 1870 Withdrawal of remaining Imperial troops. Population 99 328 (Census).
- 1871 Opening of Launceston-Deloraine railway. Tin discovered at Mt Bischoff.
- 1872 Contract concluded for building Main Line Railway.
- 1873 Main Line Railway construction began. Start of economic recovery.
- 1874 Riots in Launceston in protest at rates levied for Launceston-Deloraine railway.
- 1875 Succession of Sir Frederick Weld.
- 1876 Race meetings established at Elwick. Gold nugget worth \$12 200 found at Nine Mile Spring. Death of Trugannini, thought to be last female full-blood Aboriginal. Main Line Railway opened for traffic.
- 1877 Port Arthur closed down as a penal settlement.
- 1878 Increased activity in exploration of West Coast.
- 1879 Settlement of constitutional issue known as the 'Hunt Case'. Rich lode of tin discovered at Mt. Heemskirk.
- 1880 First telephone in Tasmania with line from Hobart to Mount Nelson Signal Station.
- 1881 Succession of Sir George Strahan. Population 115 705 (Census).
- 1882 Increased prospecting on the West Coast.
- 1883 Discovery of the 'Iron Blow' at Mt Lyell.
- 1885 Russian war scare followed by activity in improvement of defences. Formation of Mt Lyell Prospecting Association.
- 1887 Succession of Sir Robert Hamilton.
- 1890 Establishment of University of Tasmania.
- 1891 Collapse of Van Diemen's Land Bank; deep economic depression.
- 1892 Mt. Lyell Mining Co. established.
- 1893 Succession of Viscount Gormanston.
- 1896 Establishment of Tattersalls Lottery by George Adams.
- 1898 Serious bush fires. Tasmanians four to one in favour of Federation at poll.
- 1899 Departure from Hobart of *Southern Cross* (Borchgrevinck) expedition to Antarctic.
- 1900 Departure of Tasmanian contingent to fight in the Boer War.
- 1901 Proclamation of the Commonwealth read. Polling for first elections to Federal Senate and House of Representatives. Succession of Sir Arthur Havlock. Population 172 475 (Census).
- 1903 Celebration of 100 years' settlement cancelled because of smallpox epidemic in Launceston. Suffrage extended to women.
- 1904 Succession of Sir Gerald Strickland at reduced salary.
- 1905 Experiments in wireless telegraphy between Tasmania and the mainland.
- 1907 New Public Library opened; built with gift from Andrew Carnegie.
- 1909 Succession of Sir Harry Barron. Potato crop wiped out by Irish blight. State's first Labor Government under John Earle.
- 1912 Disastrous fire at North Lyell Mine, Queenstown.

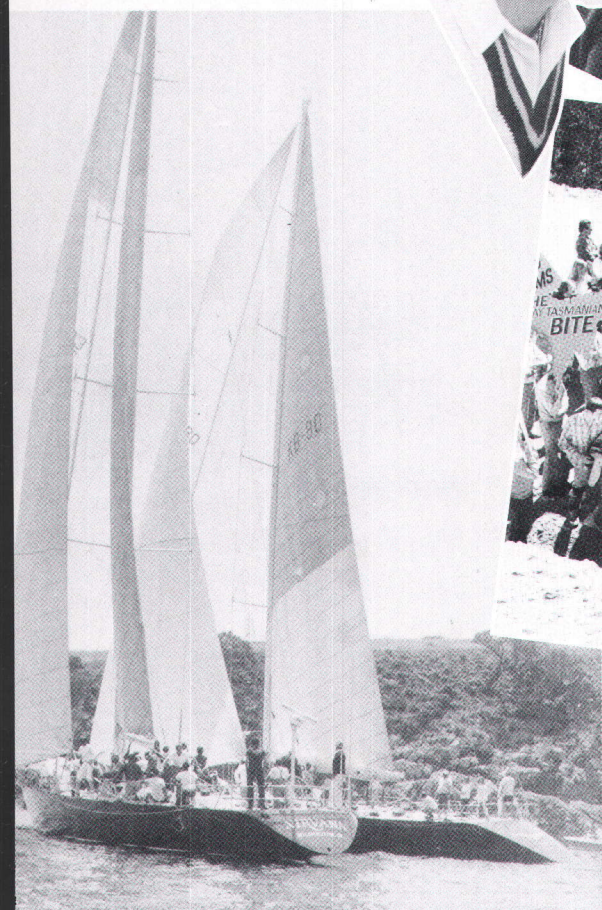
- 1913 Succession of Sir William Ellison Macartney.
- 1914 First aeroplane flight in Tasmania. Departure of first Tasmanian contingent to fight in Great War. Formation of Hydro-Electric Department.
- 1915 Serious bushfires.
- 1917 Establishment of electrolytic zinc works at Risdon and of Snug carbide works.
- 1918 End of Great War.
- 1919 First export of frozen meat.
- 1920 Visit by Edward, Prince of Wales. Purchase of site for Cadbury's chocolate factory at Claremont.
- 1921 Population 213 780 persons (Census).
- 1922 Completion of Waddamana power station.
- 1924 First superphosphate manufactured by Electrolytic Zinc Co. at Risdon.
- 1925 Discovery of osmiridium fields at Adamsfield.
- 1927 Inquiry into proposed bridge over Derwent. Visit by Duke and Duchess of York.
- 1929 Serious floods throughout Island. Establishment of automatic telephone system in Hobart. Beginning of economic depression.
- 1930 Export prices fell to half 1928 level. Australian pound devalued so that £1 sterling equalled \$A2.50 (£1/5s).
- 1931 Depression continued—10 per cent cut in federal basic wage. Initiation of austere Premier's Plan. Conversion loan to reduce rate of interest on internal federal debt by 22½ per cent. Census of population deferred.
- 1933 Commonwealth Grants Commission appointed to inquire into affairs of claimant states.
- 1934 Beginning of 35 years of continuous Labour Government with the election of the A.G. Ogilvie Ministry. Second phase of hydro-electric development commenced at Tarraleah and Butlers Gorge.
- 1936 Tasmania linked with Victoria by submarine telephone cable.
- 1937 Epidemic of poliomyelitis. Economic recovery evidenced by \$0.50 'prosperity' loading added to federal basic wage.
- 1938 Paper mill using native hardwoods established at Burnie. First turbines began operating at Tarraleah power station.
- 1939 Outbreak of World War II.
- 1940 Tasmanians sailed for Middle East with Australian 6th, 7th and 9th Divisions.
- 1941 Newsprint production began at Boyer on the Derwent. Tasmanians sailed for Malaya with Australian 8th Division.
- 1942 Uniform federal income tax commenced.
- 1943 The floating-arch Hobart Bridge opened for traffic.
- 1944 Pay-as-you-earn (PAYE) income taxation introduced from 1 July.
- 1945 End of World War II.
- 1946 Cessation of man-power controls. Rejection by Legislative Council of bill to grant Federal Government price control powers for three years.
- 1947 Court action to stop bank nationalisation by Federal Government. Demobilisation of forces completed. 'Displaced persons' commenced arriving from Europe. Population 257 078 (Census).
- 1948 Forty-hour week awarded to most workers from 1 January. Tasmanians voted 'No' almost two to one in referendum denying Federal Government power over prices and rents. Legislative Council's denial of Supply forced dissolution of House of Assembly—Cosgrove Ministry returned to power.
- 1949 Compulsory X-rays introduced in fight against tuberculosis. Clark Dam at Butlers Gorge completed. Theatre Royal purchased by the Government. Sterling devalued by 30.5 per cent and Australian pound similarly devalued.
- 1950 End of federal petrol rationing. Dissolution of House of Assembly granted by Governor and Cosgrove Ministry returned to power. Communist Party Dissolution Bill passed by Federal Parliament.
- 1951 *Communist Party Dissolution Act* declared invalid by High Court. Double Dissolution of Federal Parliament. Referendum to give Federal Government powers in regard to communism—'No' vote prevailed although Tasmanians expressed slight preference for 'Yes'.
- 1952 Single licensing authority established for hotels, clubs, etc. State's free hospital scheme ceased.
- 1953 In September, Arbitration Court abandoned system of quarterly adjustment of federal basic wage. State wages boards suspended quarterly basic wage adjustments.
- 1954 Royal visit by Queen. Bill passed to resolve deadlocks in House of Assembly. Foundation of the Metropolitan Transport Trust.
- 1955 Uranium ore discovered at Mt Balfour and Royal George. Bell Bay aluminium plant officially opened. Trevallyn and Tungatinah power schemes officially opened. Anti-Communist Labor Party (later D.L.P.) formed.



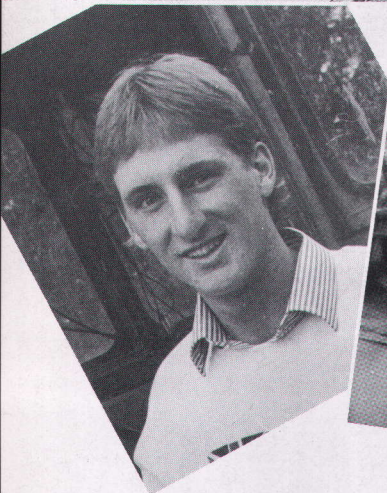
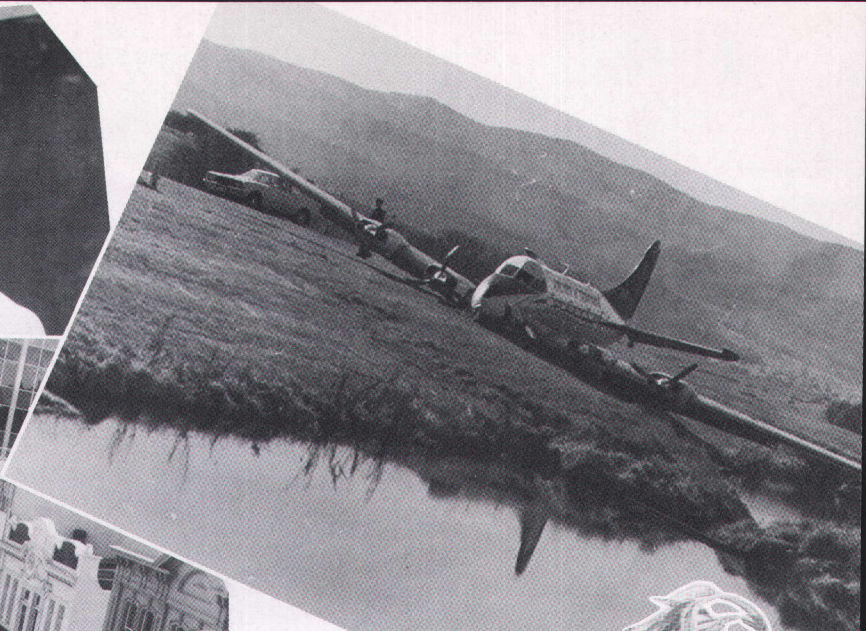
- 1956 State wages boards' restoration of 'cost-of-living' adjustments effective from 1 February but these later again suspended. Sir Ronald Cross granted dissolution of House of Assembly. Labor Party returned to power in State. Official opening of EZ Co.'s sulphate of ammonia plant. Centenary of self-government celebrated.
- 1957 Legislative Council rejected bill giving aid to private schools. First satellites—Sputniks I and II—seen over State. Centenary of Hobart's incorporation celebrated.
- 1958 Establishment of Rivers and Waters Supply Commission. Public Service Tribunal established as an industrial authority.
- 1959 First election to fill 35 seats in House of Assembly; Labor re-elected. New Federal Government system of grants reduced claimant states to two—Tasmania and Western Australia. *Princess of Tasmania* commenced roll-on roll-off ferry service Melbourne to Devonport.
- 1960 Liapootah power station commissioned. Zeehan-Strahan railway closed. Inland Fisheries Commission created. First Tasmanian telecast. Australian 'give way to the right' rule introduced on roads.
- 1961 *William Holyman*, cargo container vessel, entered Bass Strait trade. Legislative Council rejected equal pay legislation.
- 1962 Catagunya turbines began producing electricity. State Wages Boards granted three weeks annual leave. State subsidies announced for municipal fluoridation schemes. Closure of Mt Lyell railway, Queenstown to Strahan.
- 1963 Abolition of State entertainments tax. Federal Court increased margins 10 per cent and granted three weeks annual leave. Universities Commission recommended medical school for Tasmanian University.
- 1964 TAA commenced intrastate air services. Tasman Bridge opened for traffic. Hobart's water supply fluoridated. Glenorchy raised to city status.
- 1965 *Empress of Australia* sailed from Sydney on first voyage to Hobart. Provisional driving licences introduced. Dental Nurse scheme for schools announced. D'Entrecasteaux scallop beds closed for 1965 season.
- 1966 Decimal currency introduced 14 February. Burnie-Launceston co-axial cable completed. Equal pay for certain State Public Service females. Breathalyser tests approved for use by police. STD extended to Tasmania.
- 1967 Bush fire disaster of 7 February resulted in 62 deaths and over 1 000 houses destroyed. Federal Arbitration Commission abolished basic wage and substituted total wage concept but basic wage retained in State awards. Mt Cleveland tin mining town of Luina completed. HEC water reserves only 16 per cent of normal; introduction of daylight saving and power rationing.
- 1968 HEC Repulse Dam on lower Derwent completed. Batman Bridge across lower Tamar opened. Federal Government subsidy for apples and pears exported to UK and other countries. Full adult suffrage for Legislative Council elections from 1 July 1969. Capital punishment abolished.
- 1969 Parangana Dam (Mersey-Forth scheme) completed. North-West General Hospital opened at Burnie. State election resulted in 17 ALP, 17 Liberals, one Centre Party (Mr. Lyons). Mr. Lyons combined with Liberals to form coalition government; ended 35-year Labor rule in Tasmania. Full Bench of Federal Arbitration Commission granted equal pay to females performing equal work; female salaries to be raised to male salaries in stages. Copper smelter at Mt Lyell closed; concentrate sent to Japan and Port Pirie (SA) for treatment.
- 1970 First pyrites railed from Rosebery to Burnie sulphuric acid plant. EZ Co. to establish \$6.3m residue treatment plant. Royal visit. Parliament legislated to introduce permanent daylight saving. State premiers accepted Tasmanian formula for reimbursement in lieu of receipts duty.
- 1971 \$25m APPM Ltd. Wesley Vale paper plant opened. \$9m expansion program at Comalco (Bell Bay) completed. Serious shipping strike. Population 390 413 persons (Census).
- 1972 K.O. Lyons resigned cabinet portfolios and ended Liberal-Centre Party Coalition. APPM Long Reach woodchip plant commenced production. ANL vessel *Princess of Tasmania* made her final trip to Tasmania. Mt Lyell Mining and Railway Company Ltd fired last charge at its West Lyell Open-cut Mine. Federal elections—ALP returned to power (after 23 years in Opposition). 300 million years old fossil of dragon fly discovered in Hellyer Gorge (west coast area).
- 1973 First train travelled the Bell Bay rail link. The first legal casino in Australia—Wrest Point—officially opened. Vote extended to 18-year olds. The \$121m Mersey-Forth HEC scheme officially opened. Storeys Creek tin mine closed down. The *Blythe Star* lost at sea while on charter to the Transport Commission. Tasmania voted in line with other Australian states on prices and incomes referenda—'No' to both.
- 1974 BHP announced \$28.5m expansion project for the Temco ferro-alloy plant at Bell Bay. Workers under State Wages Boards' awards granted four weeks annual leave. Royal Commission's report on urban transport advocated cessation of suburban rail services. High Court ruled Tasmanian tobacco tax valid, but method of collection invalid. Double dissolution of Federal Parliament. Federal Labor Government re-elected. Women under State Wages Boards' determinations awarded equal pay. Gordon Dam completed. No fault third party insurance scheme implemented.

- 1975 Tasmanian suburban rail services ceased. Bulk ore carrier *Lake Illawarra* rammed the Tasman Bridge, leaving a 128-metre gap and causing 12 deaths. TAB began operating. Transmission of colour television programs commenced in Tasmania. Federal Government takeover of Tasmanian railways. Temporary Bailey bridge across the Derwent opened. Hotels allowed to open for Sunday trading.
- 1976 Investigation of a site for a second Derwent crossing began. A government-commissioned inquiry recommended the abolition of the TCAE in Hobart and expansion of the northern campus. Sea cargo to and from Tasmania to be subject to a freight-equalisation scheme. South-West National Park doubled in size in line with South-West Management Plan proposals. The Neilson Labor Government returned to power with a reduced majority.
- 1977 Federal Government confirmed Kingston as the site for Australia's new Antarctic Base. The Premier, Mr. Nielson, announced his retirement from 1 December to become Tasmania's Agent-General in London. A \$121m expansion, increasing plant capacity by 93 000 tonnes, opened at Comalco Aluminium (Bell Bay) Ltd. Tasman Bridge re-opened 8 October (closed since 5 January 1975). The first 144 000 kW generator commissioned at Gordon River power station. Arbitration Commission granted agricultural workers a 40-hour week plus four weeks annual leave. State Fire Authority established. Mr Lowe replaced Mr Neilson as Premier following the latter's resignation. All five House of Representative seats retained by the Liberals who filled three of the five Senate seats in elections held on 10 December. Drought conditions in many parts of the State the worst for 30 years.
- 1978 Large scale drug operation involving the smuggling of cannabis oil to Tasmania from Thailand uncovered by narcotics agents. Direct flights between Tasmania and Sydney introduced on a trial basis. Detailed plans for a second Hobart bridge made public. State Government refused to allow mining at Precipitous Bluff. The Tasmanian Railways came under full control of the Australian National Railways Commission. Australian National Railways Commission announced that all regular passenger train services in Tasmania would cease from the end of July. Federal Government gave the go-ahead for the new \$8m Antarctic base at Kingston. A major study of the State's coal reserves, by the Mines Department, revealed a potential deposit of 251 million tonnes in the Fingal Valley. State Cabinet accepted a recommendation that the Federal Hotels consortium be granted the Northern Licence to build the State's second casino. The Federal Government agreed with the Tasmanian Government on the establishment of a trial Tasmania-New Zealand air link. The State Government officially handed over 13.3 hectares of land at Newnham to the Commonwealth Government for the Australian Maritime College.
- 1979 A joint Federal-State Government study recommended the go-ahead on a \$28m second Hobart Bridge. The State Government to expand the South-West Conservation area to more than 20 per cent of the State's total area. Mr. Charles Woodhouse appointed as the state's first Ombudsman. Tasmania's Parliamentary Hansard in operation for the first time. The Chapman Report recommended that the Launceston City Council and seven surrounding councils be replaced by three larger councils. The Premier, Mr Lowe, called a state election for 28 July, 18 months ahead of schedule at which the ALP gained a five seat majority. Mr. Bill McKinnon (Labor), who lost his seat in the 28 July election, filed a petition in the Supreme Court claiming new Labor MHA in Franklin, Michael Aird, breached the *Electoral Act* by spending more than the statutory limit of \$1 500 on his election expenses. This began the so-called 'Electoral' or 'Constitutional Crisis'. The HEC announced a planned \$15m expansion to the Great Lake power scheme to increase water capacity as a buffer against prolonged dry spells. Hobart began increased permanent Saturday morning retail shopping. The HEC released a report which recommended a \$1.36 billion power development scheme involving the Lower Gordon, Franklin and King Rivers to meet the state's electricity needs until the year 2000. A new ballot system involving the rotation of names on the ballot papers used for House of Assembly elections became law.
- 1980 A seven-year program sponsored by the Federal and State Governments was approved to conserve and develop the historic Port Arthur region. Work commenced on the first stage of the second Hobart bridge. Federal Government approved proposals for the Hobart-Christchurch air link. The Minister for Education, Mr. Holgate, announced that the University of Tasmania will control teacher education in the South. A by-election for the Denison electorate was held after the 'electoral crisis' of the 1979 State election (see 1979 *Tasmanian Year Book* pp 594, 595). The seven seats were won by three Labor, three Liberal and one Australian Democrat, Dr Norman Sanders. The Hobart City Council approved the establishment of a refugee centre at Mount St Canice to house sixty Vietnamese refugees. Large coal reserves were discovered in a seam in the Fingal Valley. The Westbury Council approved building plans worth \$9m for the Tasmanian Country Club Casino to be built outside Launceston. The State Government announced that it would inject another one million dollars into Electrona Carbide Industries in a last-ditch attempt to keep the company solvent. The Treasurer introduced legislation into the House of Assembly to allow \$530m to be spent on the HEC's Pieman River development. The Hydro-Electric Commissioner, Mr Ashton, said that Tasmania had no power to spare for an electricity grid to South-East Australia. Hobart was selected as the site for the permanent headquarters of the International Division for the Conservation of Antarctic Marine Living Resources. East-West Airlines were given approval for the only direct Hobart-Sydney air service. The National Parks and Wildlife Service started a major advertising and promotion campaign aimed at short-circuiting the HEC's proposed Franklin-Lower Gordon

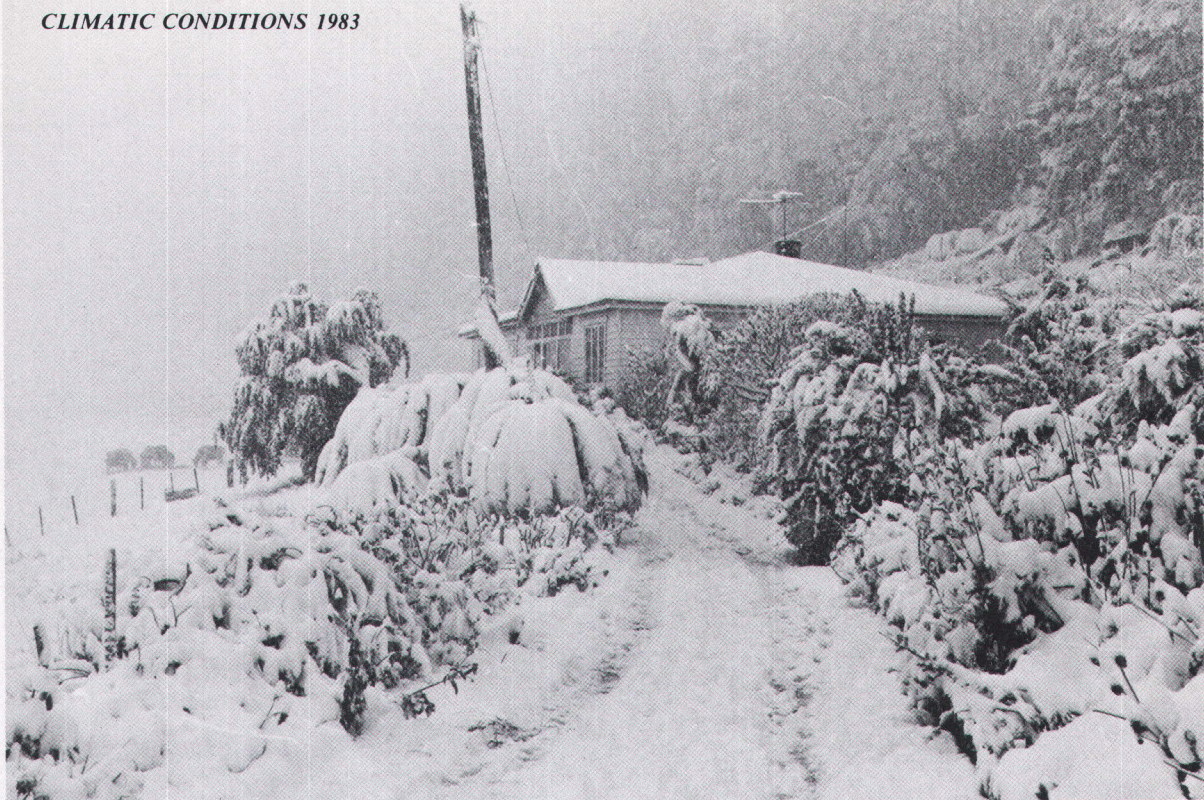












*Many parts of Tasmania recorded winter temperatures well below zero. A record low of  $-13^{\circ}\text{C}$  was registered at Tarraleah, Butler's Gorge and Shannon.*



*Severe drought conditions were experienced throughout Tasmania. Hobart's summer was the driest for 85 years.*

*[Hobart Mercury]*





*Carrington Mill, Oatlands*

**HISTORIC SITES**  
*[Tasmanian Government Stills Photographic Section]*

*Richmond Gaol*





power scheme. The Federal Government gave the 'go-ahead' for the Hobart-Christchurch air link to operate from November 1980. The State Government decided to save the Franklin River by opting for a more expensive set of hydro-power schemes in the South-West. The Franklin River would be included in a Wild Rivers National Park which will be extended to include the Davey River. The decision was to flood the Gordon at the junction of the Olga and to construct four single stage schemes on the King River. A report tabled in the Legislative Council recommended boundary changes for Legislative Council divisions—Tamar, Meander, Mersey, Cornwall, Westmorland and South Esk. Parts of Southern Tasmania were facing the worst drought since white settlement. Renison Ltd found a further 700 000 tonnes of tin ore on its West Coast lease. The Auditor-General revealed a multi-million dollar list of State Government mistakes and failures in control of construction projects. APPM announced that it would spend \$35m over the next two years in converting its energy source from oil to a combination of coal, wood waste and bark. In the Federal election all five sitting Liberal MHR's were returned. Rae, Townley (Lib), Coates, Hearn (ALP) and Harradine were elected to the Senate. The Mt Nelson campus of the TCAE was to be converted to a community college. The Federal Minister for National Development and Energy, Senator Carrick, released a report which showed that a sugar beet ethanol industry in Tasmania would be able to compete with other forms of energy at current prices. The Gordon-above-Olga power scheme was passed by the House of Assembly. The first direct flight from Hobart to Christchurch was made by Ansett Airlines. The Australian Bureau of Transport Economics recommended that a two-ship passenger and freight service between Westernport Bay (Victoria) and Burnie be introduced. The Upper House Select Committee recommended the HEC's proposed Gordon-below-Franklin Scheme and rejected the Government proposed Gordon-above-Olga Scheme. A State constitutional crisis arose as the Legislative council voted that it had the power to change the power scheme bill to the Franklin rather than the Olga Scheme, contrary to the President's ruling.

- 1981 Myer Hobart employees voted to strike and picketed store entrances in support of Launceston colleagues after a decision to open for all day Saturday trading had been made. Electrona Carbide Works closed. The Royal Hobart Hospital was forced to close two wards due to an outbreak of the antibiotic-resistant germ, *staphylococcus aureus* or 'golden staph'. Bushfires at Zeehan destroyed 40 homes, a hall, machinery and cars—estimated damage \$5 million. All-day Saturday trading was abandoned after a truce in the trading hours battle. A major archaeological discovery of stone tools and animal bones was made in the state's South-West. Tasmanian Film Corporation's production *Manganinni* won the major award at the Festival Lumiere at Lyon, France. Tasmania experienced its hottest summer in 20 years with many centres reaching record temperatures. The Premier, Mr Lowe, suggested a referendum to resolve the State's next power scheme. The State Government banned Saturday afternoon trading by companies employing more than 100 people on a statewide basis. Six Tamar municipalities declared opposition to the State Government's amalgamation proposals for nine Northern municipalities. The Federal Government agreed to subsidise airfares to and from the state by 10 per cent following acceptance of the Holcroft report. The State Government announced the boundaries for the new Franklin-Lower Gordon Wild Rivers National Park to be proclaimed when the Gordon-above-Olga power scheme was approved by Parliament. The State was visited by Prince Charles who presented Devonport with its charter of city status. Charles Davis took over the wholly Tasmanian based company G.P. Fitzgerald & Co. Ltd. Carbon dating of stone-tools found in Tasmania's South-West proved that primitive man was in Tasmania before the glacier stage of the last ice age. Coles opened all K-marts and 10 New World Supermarkets throughout Tasmania in defiance of the Act which prohibited those shops employing more than 100 workers from opening between the hours of noon Saturday and 9 a.m. Monday. The State Government announced the end of free public hospital treatment in Tasmania. Drought breaking rains persisted throughout the State bringing relief to farmers suffering the long dry spells in the Midlands, East Coast and South East regions. The State Government decided to prosecute G.J. Coles supermarkets and K-marts for allegedly breaching the *Shop Trading Hours Act* by opening beyond noon on Saturdays. A rowdy meeting of more than 400 HEC workers called on the Premier, Mr Lowe, to resign or call an election over Tasmania's next power scheme. The Grants Commission proposed that \$64 million be cut from Tasmania's general revenue allocation. The Australian Labor Party's State Council directed Mr Lowe, to halt Tasmania's power deadlock and to hold a referendum on the issue. Arthur B. Moore Pty Ltd, one of Tasmania's biggest construction firms, crashed owing \$1.9 million to approximately 400 creditors. Woolworths Ltd gained a controlling interest in the big Tasmanian supermarket chain, Purity Distributors. East West Airlines, the Sydney-based Fokker specialist, was to take over TAA's North-west Coast air services from 1 February 1982. A Senate Select Committee recommended the abolition of the two-airline agreement for Tasmanian air services and the upgrading of the ferry services to the mainland. Approximately 3 000 pro-wilderness demonstrators marched peacefully against the construction of dams in the South-west region. Dame Enid Lyons, widow of former Prime Minister Joseph Lyons, and Australia's first woman Federal Member of Parliament and Cabinet Minister, died at Ulverstone at the age of 84. The State Budget was announced—a fuel tax of 1.6 cents per litre of petrol was implemented. A referendum was announced for November concerning the State's next power development. An appeal by retailer G.J. Coles Pty Ltd against a conviction for breaching the *Shop Trading Hours Act* was rejected by the Hobart Supreme Court. The Minister for National Parks and Wildlife, Mr Lohrey, was dismissed by the Premier, Mr Lowe, for publicly supporting a report which claimed hydro power was not Tasmania's cheapest energy alternative and

recommended a thermal power station fuelled by coal. Conservationists launched their referendum campaign by demanding the reinstatement of Mr Lohrey. State Government Caucus decided to meet to discuss the party split and the threat of resignations by rank and file members of the no-dams issue. A major study by the committee of inquiry into electricity generation and the sharing of power resources in south east Australia found that it would be uneconomic to connect Tasmania to the electricity generation of Victoria and New South Wales. The Leader of the Opposition, Mr Geoff Pearsall, resigned from party leadership. Mr Robin Gray was elevated from the deputy leadership and Mr Max Bingham was elected deputy leader. The Premier, Mr Doug Lowe, was deposed and Mr Harry Holgate replaced him as Premier. Mr Lowe resigned from Cabinet, Caucus and the ALP and took his place in the House of Assembly next to Australian Democrat, Dr Norm Sanders. The Government survived a no-confidence motion. The State Labor Government lost its majority in the House of Assembly with the resignation of a supporter of Mr Lowe, Mrs Mary Willey. The Government survived another no-confidence motion. The Tasmanian Conservation Foundation called for an informal vote in the referendum by writing 'no dams' on the ballot paper. A Royal Commission was appointed to investigate the powers of the Legislative Council. Legislation for random breath tests for drivers was introduced to the Legislative Council. A report by Sir George Cartland attacked managerial skills of the State Public Service and recommended reform at every level. The State Government pledged that a dam would be built in the South-west whatever the referendum result. The referendum resulted in an extremely large informal vote but most supported the Gordon-below-Franklin option. State Parliament prorogued until 26 March 1982 without considering the results of the power referendum.

- 1982** A 6.6 per cent increase in domestic airfares was announced by the Independent Air Fares Committee. A recommendation was made that the Seven Mile Beach protected area be developed as a leisure, sporting and holiday centre. Launceston media group, Examiner Northern Television Ltd, acquired 40.1 per cent of the issued capital of TVT6. Burnie cheesemaker Lactos had a \$5m injection of funds from its French-based owners. The South-West National Park, the Franklin-Lower Gordon Wild Rivers National Park and the Cradle Mt-Lake St Clair National Park were nominated by the Federal Government for the World Heritage List; the proposed dam on the Franklin River lies within the nominated area. Carbon dating confirmed that Kutikina Cave (Fraser Cave) on the Franklin River was first occupied in the last Ice Age, approximately 20 000 years ago. The Tasmanian Potato Industry Authority ceased operation after three years. The State Government voted for the Gordon-below-Franklin hydro electric scheme rather than the Gordon-above-Olga scheme as its official choice. East-West Airlines began flights to the North-West Coast, taking over the 35 year service from TAA. The Government's appointment of television environmentalist, Mr Harry Butler as its \$625-a-day consultant on conservation triggered a storm of protest. 32 000 State Government employees agreed to defer cost-of-living pay increases until July in an attempt to save the Government up to \$11m this financial year. North-West Coast farmers faced severe financial hardship as a result of the drought. A plague of grasshoppers on Flinders Island reached serious proportions — taking everything green with it — pastures, curtains, housepaint and even a pair of green underpants! It was announced that a Melbourne-based fish processing company is to establish operations on the Tamar River at Beauty Point. An army company was flown to Tasmania from Holsworthy (NSW) to relieve firefighters. A special state of emergency was recommended, the first time since the Emergency Services Act was proclaimed in 1976 that this power has been used. Mrs Mary Willey officially resigned from the ALP. An announcement was made that TAA will take over the operation of the Hobart-Christchurch air link from Ansett who withdrew from the route on economic grounds. State Government released details of a proposed conversion of the Mount Nelson College of Advanced Education into a new State police headquarters. Rossarden Mines Ltd announced 130 retrenchments. An announcement was made that Hobart Matriculation College is to be closed in favour of Community Colleges at the Elizabeth Matriculation College site and at Claremont. Fire swept through the Rosetta Primary School causing \$1.25m damage. Police divers searched South Cape Bay for the remains of a swimmer believed to have been taken by a white pointer shark. 36 employees at Cleveland Tin Limited's mining operation at Luina were retrenched. A major review of State Government construction activities was announced to seek to eliminate duplication in various Government departments. 100 workers to lose their jobs at Burnie's APPM Ltd mill. World wool price record was broken at the Launceston Wool Sales. Macintosh power station became operational — the first stage of the \$540m Pieman River power development. The Parliamentary Public Works Committee opposed the construction of a separate international airport terminal for Hobart. Tasmania was admitted to full Sheffield Shield status for the 82-83 cricket season. The Holgate Labor Government was defeated on a no confidence motion by a majority vote of the Liberal Opposition, two Labor defectors and a Democrat. Plans for a new Bass Strait ferry to replace the Empress of Australia were presented to ANL by representatives of the Wartsila Shipping Company — Finland. Two reports, one an HEC analysis and the other by Brisbane engineering consultants, stated that the Gordon-below-Franklin hydro power would be cheaper than thermal power. Launceston textile firm, James Nelson Pty Ltd announced it may be forced to close which would lead to the retrenchment of 140 people. The Pioneer tin mine, operated by Umdex Mining Ltd, was closed, resulting in the retrenchment of 40 employees. The 1982 State election attracted a record total of 127 candidates. An announcement was made that 31 workers are to be retrenched from Risby Forest Industries sawmill. There was no central election advertising by political parties on television, radio or in

newspapers during the 15 May State election campaign to comply with legal opinions on the Electoral Act. Australia's biggest tungsten producer, King Island Scheelite Ltd, retrenched employees and closed its operation for a month. Conservationists attacked a report by Mr Harry Butler which agreed with the development of National Parks provided there are strict environmental controls. The Launceston Federal Country Club Casino received its official gaming licence and opened for business. The election resulted in the Liberal Party forming a Government in its own right for the first time in Tasmania's history. Wind gusts of up to 122 kmh caused widespread property damage and power failures throughout Hobart. Real estate agent, Mr Hank Petrusma, won a closely contested ballot for the Legislative Council seat of Hobart. The new Premier, Mr Robin Gray, was sworn in by the Lieutenant Governor, Sir Guy Green. The new Liberal Government removed 60 contract staff from their posts. Mr Ken Wriedt was unanimously elected leader of the Labor party. State Government implemented two of its election promises: it authorised payment of a \$500 grant to employers for every new employee hired; and the present two per cent stamp duty on loans was abolished. A decision was made to expand the Ulverstone potato processing plant (operated by Edgell Birdseye) resulting in the creation of 100 jobs and demand for an extra 50 000 tonnes of potatoes per year. Plans for statewide football competition for 1983 were scrapped. The ALP National Executive took control of the Tasmanian branch until at least March 1982. The Prime Minister, Mr Fraser, officially opened the World Ploughing Championship at Longford. Legislation for the controversial \$453m Gordon-below-Franklin power scheme was finally passed through Parliament. An announcement was made that the salaries of public servants earning more than \$25 000 were to be frozen. The NTFA decided to revert to its original six team roster next year, ending the two year experimental Greater Northern Football League. State Government requested Federal aid to help fund Tasmania's record deficit estimated at \$38m. The Risdon plant of Electrolytic Zinc Company announced a reduction in its workforce as a cost cutting measure. The Minister for Health, Mr Cleary, announced increases in Tasmanian Public Hospital fees. It was decided to replace the *Empress of Australia* with a \$50m luxury ferry by 1985. 91 workers at the Risdon Plant of EZ were retrenched through natural wastage, retirement and voluntary retrenchment. Union members began a campaign for a 38 hour week at EZ's Rosebery plant. The EZ Co announced that 167 employees were to be retrenched at Rosebery. The Federal ALP Conference decided to oppose the construction of the Gordon-below-Franklin scheme. APPM shelved plans for expansion of its Wesley Vale plant. A decision was made to upgrade Hobart's airport terminal. Features of the Liberal Government's first budget were help for first home buyers and low income home buyers, relief from payroll tax and the abolition of death duties and tax on loans. A further 15 men were retrenched from Branhholm Sawmills Pty Ltd. United Milk (Tas) successfully negotiated large export contracts for cocoa milk powder mixes with Japanese firms. Launceston recorded its lowest temperature for six years: minus 5°C. The loss of mainland markets for Tasmanian pallet timber forced a North-West timber mill to sack nine men and lose one of two sawmills. Tasmania's public servants were asked to accept a total wage freeze or face retrenchments among their ranks. The Tasmanian Government Tourist Bureau achieved record sales for the 1981-82 financial year; an increase of 18.86 per cent on the previous year. Work began on the \$11.8m CSIRO Marine Laboratories at Castray Esplanade. State Government decided to introduce new measures to curb the mounting road toll. These included random breath testing and a reduction in the permissible blood alcohol level from .08 to .05. Premier Gray announced that police would act against conservationists who attempted to stop work on the Gordon-below-Franklin power scheme. Beverley Buckingham was awarded the 1981-82 Tasmanian Jockeys premiership and in so doing she became the first woman to win a jockey's premiership in any Australian state. 30 anti-dam protestors were escorted from the public gallery after a demonstration during debate on a government proclamation to revoke parts of the Wild Rivers National Park. The Mt Lyell copper mine at Queenstown announced it would close for two months and introduce a four-day week in an effort to avoid prolonged closure. A northern Tasmanian consortium of three companies, to be known as Allied Fisheries (Tasmania) Pty Ltd is to finance a \$7.2m combined boat-building, fishing, processing and marketing venture centred on Beauty Point. The Minister for Primary Industry announced that the Tasmanian Apple and Pear Marketing Authority (TAMA) would be disbanded early in 1983. The Federal Government rejected a request from the Premier, Mr Gray, to withdraw its nomination of the South-West wilderness for the World Heritage list. APPM announced that its Burnie mill had switched from oil to coal for its steam production in a move which was estimated to save the company several million dollars and provide employment in the mines of the Fingal Valley. The Hughes report on Education Department administration tabled in Parliament recommended substantial structural changes and staff reductions. 3 000 State Government employees rallied in Franklin Square to protest at Government policies towards its workforce. The North-West Football Union announced its decision to revert to a nine-team roster in 1983. The Liberal Government's first State Budget was described as a 'jobs boost budget'. The Repco Bearing Co. in Launceston announced that due to a downturn in orders, the company had been forced to retrench 51 people. The Premier announced that Johnson and Johnson would open an alkaloid manufacturing plant at Westbury at the end of the year which would employ 15 people. The zoning system for State Government schools was abolished. Associated Pulp and Paper Mills Ltd (APPM) retrenched 190 employees from its Burnie mill and revealed that a further 100 jobs were at risk. The Government's budget measure to abolish death duties passed the House of Assembly. The Australian Paper Manufacturers' (APM) Geeveston pulp-mill stopped production and closed with an

expected loss of 350 jobs. The State Government committed \$3.9m to three sporting developments: a Lake Barrington rowing course, a baseball diamond at Kingston and the upgrading of the St Leonards velodrome. 150 day-labour employees accepted redundancy payments totalling a payout of \$1.7m. Blazes raged through the south of the state in the wake of Hobart's hottest November day since 1937 (35.6°C). The Federal Labor Party announced a no-dams policy for a Federal Labor Government in a decision which split the party in the State. Winds gusting up to 113km buffeted southern Tasmania. The Ovaltine factory at Ulverstone announced a \$3.1m expansion plan. Following arrests at cricket matches, the TCA announced a ban on spectators bringing liquor to the TCA ground. Unemployment reached a new peak level of 11.8% with 18 600 people looking for full-time work in Tasmania. State Government decided to prepare a \$3m minor works program to help curb unemployment. It was announced that Tasmanian police are to be given new powers in a bid to combat a blockade of dam site construction in the South-West by conservationists. Legislation reducing the permissible blood alcohol level for drivers from .08 to .05 was introduced to Parliament. Australian National Line (ANL) announced that it would replace the *Empress of Australia* with two joint passenger-cargo vessels. Premier Gray was accused of promoting a bloody conflict in the South-West by his moves to give police new powers of arrest. The Senate select committee on South-West Tasmania came out against building the dam and put further pressure on Federal Cabinet to intervene. The Attorney-General, Mr Bingham, announced that Tasmania had formally applied to have its opposition to World Heritage listing heard by the World Heritage Committee in Paris and announced that he would go to Paris to lobby the Committee. Federal Government approved the upgrading of the Wynyard aerodrome to medium jet standard at an estimated cost of \$8m. Air New Zealand began a new Tasman service between Hobart and Christchurch. The Premier, Mr Gray, gained \$9m in extra Federal funds for the State. It was announced that Tasmania would have random breath testing after the Legislative Council voted in support of it. Federal Government announced it would not intervene in the construction of the Gordon-below-Franklin dam. Approximately 1 500 people marched through the streets of Queenstown in support of Premier Gray's policies and the damming of the Gordon River. Police began their first arrests of TSW blockaders on the Gordon River — five people were arrested near the HEC camp. Tasmania won the Sheffield Shield match against Queensland. The World Heritage Commission placed Tasmania's endangered South-West wilderness area on its list. A special sitting of the magistrates court in Queenstown remanded 47 people in custody after they had been charged with trespassing on HEC property in the South-West. State Government announced a freeze on all Government services and charges for 6 months from 1 January. The State Government agreed to sell the Tasmanian Film Corporation to a Hobart Company, Hukot Adina Pty Ltd. The State Government made a \$500 000 loan to the Mt Lyell Mining Company at Queenstown to help offset low world copper prices. A fire at Longford Primary School caused an estimated \$100 000 worth of damage. A total of 43 people were arrested for trespassing at the dam site bringing the total to 196 during the four-day action. A government error caused a deferral in the implementation of the new breathalyser legislation. Australian Democrat Dr Norm Sanders resigned from House of Assembly to contest the Senate next year. An announcement was made that the Federal and State Governments would provide \$9.2m for a seven year conservation and development program at Port Arthur. Three crashes soured the opening day of the Coastal Christmas cycling and athletic carnivals at Latrobe. A Devonport man surrendered to police after a 7½ hour siege which began after he had attempted to blow himself and his family up with gelignite. Swiss Urs Freuler won the blue ribbon Latrobe Wheel. Australian Railway Union proposed a scenic round-Tasmania railway as an alternative to the Tasmanian Government's dam. Staff at Wrest Point casino considered strike action on New Years Eve in protest at the Federal Pacific Hotels plan to retrench up to 60 staff at its Wrest Point and Launceston hotel casinos. Glenn Ritchie won the \$1 100 Big M. Devonport gift. The results of the yachting races were as follows: Melbourne-Devonport (slowest on record), line honours again went to *Jemima* and winner on handicap was *Damel*; Melbourne-Hobart, line honours went to *Cut Loose* and the handicap winner was *Solandra*. The Sydney-Hobart race saw the most dramatic finish ever when *Condor of Bermuda* took line honours by three metres (seven seconds) from *Apollo*. The winner on handicap was *Scallywag*.

1983 See Appendix B.

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See also the Index of Special Articles which precedes the General Index at the back of this Year Book for a listing of historical articles included in the various editions of the *Tasmanian Year Book* (entered under 'Historical Articles').

## CHAPTER 2

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## Chapter 2

### PHYSICAL ENVIRONMENT

#### GENERAL DESCRIPTION

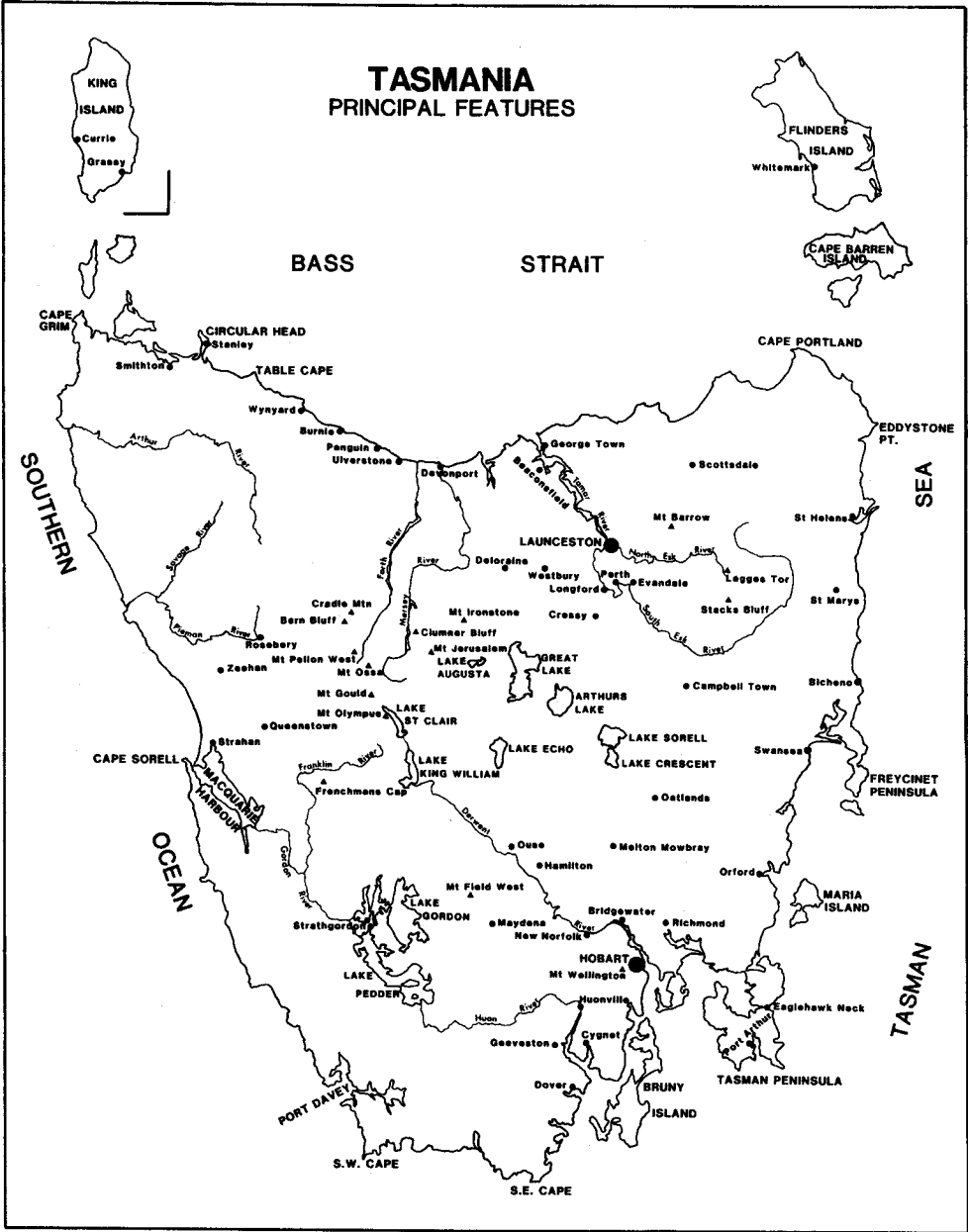
##### Location and Area

The State of Tasmania is a group of islands lying south of the south-east corner of the Australian mainland; the major island is Tasmania and the more important of the lesser islands are King, Flinders and Bruny. Roughly shield-shaped with the greatest breadth in the north, the Tasmanian mainland extends from  $40^{\circ} 38'$  (the official northern boundary of Tasmania is  $39^{\circ} 12'$ ) to  $43^{\circ} 39'$  south latitude and from  $144^{\circ} 36'$  to  $148^{\circ} 23'$  east longitude. The coastline is bounded by the Southern Ocean on the south and west and the Tasman Sea on the east, while the approximately 240 kilometres wide Bass Strait separates the island from the Australian mainland. Macquarie Island, a part of the State, is situated at  $54^{\circ} 38'$  south latitude,  $158^{\circ} 53'$  east longitude and is bounded by the Southern Ocean.

The area of the whole State, including the lesser islands, is 68 300 square kilometres or about 0.9 per cent of the total area of Australia (7 686 900 square kilometres); it is just under one-third the size of Victoria, the smallest mainland state, and is less than half the size of England and Wales.

Mainland Australia, extending as it does well north of the Tropic of Capricorn, and with much of its area in the zone of the sub-tropical anti-cyclones, is basically a warm, dry continent. Tasmania is in the temperate zone and practically the whole island is well watered with no marked seasonal concentration; there are no deserts or drought areas as found extensively on the adjacent mainland. Being south of latitude  $40^{\circ}$ , it is on the edge of the wind belt commonly known as the 'Roaring Forties' and, with South America the nearest land mass to the west, Tasmania's weather is subject at times to strong winds and heavy rain about the south and west coastal areas. Because Tasmania is the most southern state, there is a tendency to think of it as being close to the Antarctic but its latitude is matched, in the northern hemisphere, by that of Madrid (Spain) and Pittsburgh (USA). In addition, as Tasmania is an island, it is sheltered from the extremes of heat and cold experienced in these two centres. The effect of its insular position is illustrated by the variation between summer and winter mean temperatures in coastal towns—this rarely exceeds  $8^{\circ}$  Celsius. Comparing Hobart (Tasmania) with Melbourne (Victoria), mean maxima are some  $3^{\circ}\text{C}$  warmer and mean minima  $1.5^{\circ}\text{C}$  warmer in the Victorian capital.

Apart from the Great Dividing Range in the east, continental Australia is predominantly a land of low plateaux and plains with little relief. By way of contrast, Tasmania could legitimately be called the island of mountains, since it has the largest proportion of high country to its total area, compared with the other states. The distinctive feature of the island is not so much the height of the mountains—few exceed 1 500 metres—but rather the frequency with which they occur. The *Australian Pilot*, Vol. 11 describes Tasmania as 'probably the most thoroughly mountainous island on the globe'.



### Principal Physical Features, Tasmania

The following table lists the principal mountains, lakes and rivers of Tasmania (for their locations see the previous map):

Principal Physical Features			
Mountains			
Name	Height (metres)	Name	Height (metres)
Mt Ossa .....	1 617	Mt Gould .....	1 491
Legges Tor .....	1 573	Mt Jerusalem .....	1 491
Barn Bluff .....	1 559	Mt Olympus .....	1 447
Mt Pelion West .....	1 554	Frenchmans Cap .....	1 443
Cradle Mountain .....	1 545	Mt Ironstone .....	1 443
Stacks Bluff .....	1 527		
Lakes			
Name	Area (square kilometres)	Name	Area (square kilometres)
Lake Gordon (a) .....	272	Lake Sorell .....	52
Lake Pedder (b) .....	241	Lake King William (a) .....	41
Great Lake (c) .....	170	Lake Echo (c) .....	41
Arthurs Lake (c) .....	64	Lake St Clair .....	28
Rivers			
Name	Length (kilometres)	Name	Length (kilometres)
South Esk (d) .....	201	Huon .....	170
Gordon .....	185	Mersey .....	146
Derwent .....	182	Arthur .....	113

(a) Man-made.

(b) Man-made—inundated the much smaller natural Lake Pedder.

(c) Natural lake enlarged by dam(s).

(d) From source to confluence with North Esk; at this point the river becomes known as the Tamar. If the Tamar is included the length of the South Esk is a further 70 km.

## PHYSIOGRAPHY

### Introduction

Tasmania is an island of mountains and is unique among Australian states in being predominantly influenced by polar maritime air masses. From the point of view of settlement and development, these two factors have combined to create assets against which must be weighed certain liabilities. The island, a mere 296 kilometres from north to south and 315 kilometres from east to west, has a wide variety of mountains, plateaux and plains, of rivers, lakes, and tarns, of forest, moorland and grassland, of towns, farms and uninhabited (and virtually unexplored) country. The temperate maritime climate partly explains Tasmania being called the most English of all states but other factors operate to heighten the comparison—the pattern of agricultural settlement with orchards, hedges and hopfields; the lake country; the early freestone architecture still common in the east and south east and the roadsides and villages dotted with oaks, elms and poplars. Nature and the early settlers have provided the assets for a flourishing tourist industry which is currently being vigorously developed. Assured rainfall and mountain storages have also given birth to development of hydro-electric power and, indirectly, to industry. The growth of forests, too, is promoted by suitable rainfall and temperature, and this forms the basis for industries such as timber-milling, newsprint and other paper production and wood-chipping.

The mountainous nature of the island is confirmed by surveys, which show six features exceeding 1 500 metres, 28 exceeding 1 220 metres and with a substantial part of the Central Plateau above 900 metres. The highest mountain is Mt Ossa (1 617 metres) some 16 kilometres north-west of Lake St Clair; north-west again from this peak lie Mt Pelion West (1 554 metres), Barn Bluff (1 559 metres) and Cradle Mountain (1 545 metres). In the Ben Lomond area, the principal features are Legges Tor (1 573 metres) and about 10 kilometres south, Stacks Bluff (1 527 metres). Each of these mountainous regions and a number of others have been set aside as national parks, two of which, Ben Lomond and Mt Field, are renowned for winter sport.

### Water Resources

Fresh-water navigation has played very little part in Tasmania's development, the rivers being too fast-running, shallow or short. Of the four major ports, three are located on tidal estuaries—Hobart on the Derwent; Launceston on the Tamar and Devonport on the Mersey (Burnie has built a port on the open sea, protected by breakwaters). Rivers, however, are significant for three reasons: (i) use of headwaters for electricity generation; (ii) domestic and industrial water supply; and (iii) irrigation. Hobart, for example, draws much of its water supply direct from the upper River Derwent without use of a dam and the river flow is adequate to service a population at least 10 times greater than that at present. The development of hydro-electric power has been based on full utilisation of the sources and tributaries of the Derwent with a chain of power houses stretching from Clark Dam on Lake King William to Meadowbank only 51 kilometres from Hobart. The naturally southward draining Great Lake waters are diverted northwards through the Poatina power station and discharged into the South Esk River system. The waters of the South Esk have been further harnessed at Trevallyn. In the north-west, the Mersey-Forth scheme exploits the Fisher, Mersey, Wilmot and Forth Rivers in a development spread over approximately 2 070 square kilometres. Stage I of the Gordon River power development scheme in the south-west was completed in 1978, creating the largest fresh-water storage in Australia. This does not exhaust the possibility of future hydro-electric development, as construction work on the Pieman River system is well advanced with completion scheduled for 1986.

To obtain a true perspective, it should be appreciated that large areas of the State cannot be cultivated because there is too much rainfall (in contrast with the mainland of Australia where often the reverse situation applies). Further, the mountainous terrain and accompanying highland climate have restricted farming to relatively small areas of suitable country, mainly river valleys, coastal plains and the lower plateaux. In 1982, farm statistics showed that 32 per cent of the State's area was occupied by rural holdings; 4.1 per cent of the area of rural holdings was under crop and a further 42.0 per cent under sown pasture. The remaining 53.9 per cent of rural holdings included bush runs, uncleared scrub or possibly land unsuitable for any rural purpose at all. A high proportion of the State's area not included in rural holdings is composed of forests, national parks, subalpine moorland and lakes.

### Physiographic Regions

The physiographic regions of the State are as follows:

*Central Plateau:* The main feature is a relatively undissected, dolerite-capped plateau sloping generally south-eastward from an average level of 1 065 metres in the north to 610 metres in the south, and drained almost wholly by the Derwent system. The northern and eastern boundaries of the Plateau are the Great Western Tiers (paradoxically named since they lie in the central north of the island). This is known as the 'lake country' of the island and is one of the chief sources of hydro-electric power.

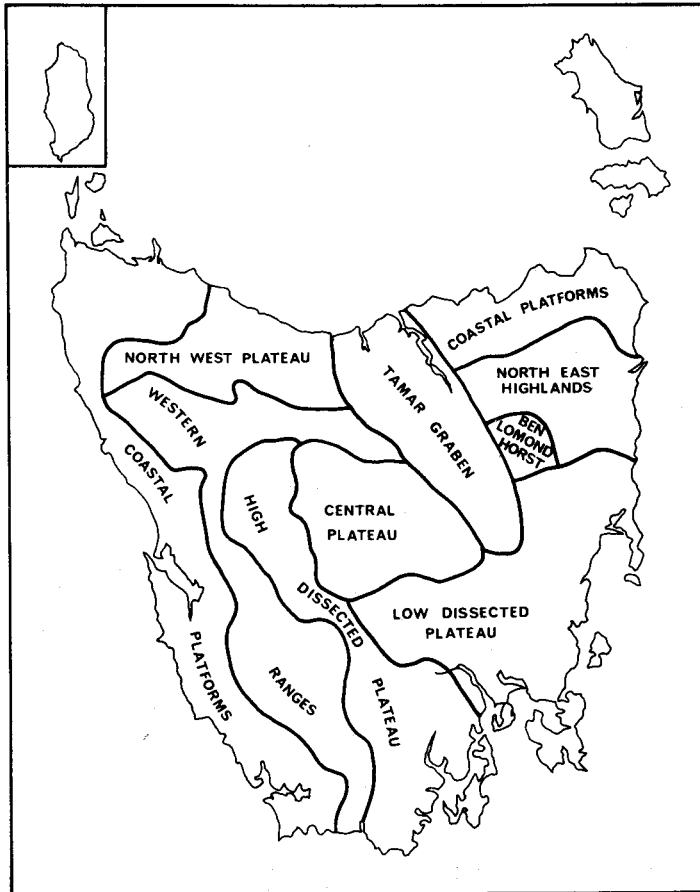
*High Dissected Plateau:* West of Lake St Clair, dolerite caps steeply-tilted sediments and the plateau is much dissected; it comprises a series of peaks and broken ridges. The coastlands in the extreme south of the region are rugged but in the D'Entrecasteaux Channel and Huon River areas, narrow coastal belts have been devoted to specialised agriculture.

*Western Ranges:* The high dissected plateau is bounded by a series of mountain ranges running parallel to the West Coast and in this region are located the State's principal mines. The south of the region is virtually uninhabited.

*Western Coastal Platforms:* Throughout almost the entire length of the West Coast, an uplifted and much dissected peneplain slopes westward from about 275 metres altitude, ending abruptly in cliffs more than 30 metres high. In the south of this region, superhumid button grass plains predominate, and the area is uninhabited. On the coastal plain south of the Arthur River, however, dairy cattle are wintered on agistment runs, while north of the river dairying begins to appear and swamps have been drained to allow farming.

*North-West Plateau:* North of the Western Ranges lies a plateau averaging nearly 610 metres altitude and important mainly for forestry; the coastlands derive mainly from basalt, giving rise to intensive mixed farming based on dairying, potatoes and crops for canning and freezing, such as peas and beans.

Tasmania's Physiographic Regions



The above regions derive from a classification by J. L. Davies, M.A., PhD., University of Tasmania.

*Tamar Graben:* This graben (rift valley) is the largest plain and the leading agricultural and pastoral district in the State; it ends in the drowned inlets of the Tamar and Mersey estuaries and of Port Sorell, in the north.

*North-East Coastal Platforms:* This region consists of undulating lowland but the soils are acidic and the land is used only for grazing.

*North-East Highlands and Ben Lomond Horst:* This region comprises mostly uplifted remnants of old fold mountains dominated by the 1 525 metre dolerite-capped plateau horst of Ben Lomond, an outlier of the Central Plateau. Here agriculture is largely confined to small basalt-derived basins. Some minerals are worked.

*Low Dissected Plateau:* In the south-east lies a low dissected dolerite plateau averaging perhaps 365 metres and used mainly for grazing. The northern coastlands of this region are narrow and also devoted to sheep, but the southern coastland is important for its specialised agriculture. At the extreme south of the region is the drowned estuary of the Derwent and the Tasman and Forestier Peninsulas.

## DESCRIPTION OF STATISTICAL DIVISIONS

### Introduction

Earlier in this chapter the State of Tasmania was briefly described by analysing its terrain in terms of physiographic regions. For statistical purposes, the State is also analysed in divisions but these do not necessarily coincide with physiographic regions, one reason being that the former are basically groupings of whole municipalities. The traditional Tasmanian statistical divisions, in use for over 50 years, were exposed to searching scrutiny in 1971 and the decision was taken to introduce a new structure, to be applied to statistics in respect of periods commencing on or after 1 July 1972.

### History of Statistical Divisions

The grouping of administrative areas into divisions for statistical purposes can be found in annual volumes of the *Statistics of Tasmania* dating back to the nineteenth century. The administrative areas included: police districts; registration districts; electoral districts; and municipalities. The boundaries of these areas were subject to periodic changes. The *Local Government Act* 1906 provided a basis for the whole State coming under uniformly constituted local government and gradually the divisional grouping of administrative areas was confined, in official statistics, to municipalities. As a result of this Act, fixed local government area (municipality) boundaries were delineated in 1907 by a commission specially set up for the purpose. The new boundaries have remained broadly unchanged since 1907 although there have been numerous relatively minor boundary changes. One exception is that the old municipalities of 'Hobart', 'Queenborough' and 'New Town' were combined to form the new municipality of 'Hobart' in 1919. The names of several municipalities have also been changed since 1907.

In 1919, groupings of local government areas used were very similar to those still used in 1971; in some series Hobart, Launceston and Glenorchy were separately specified as components of an 'Urban Division' distinct from the region in which each was located.

The basis for these 1919 groupings can only be inferred since no specific criteria were specified in the records. The Western Division clearly combined the 'west coast' mining municipalities into one entity; the Southern Division seemed to be based on orcharding, small fruit and hop areas; while the South Eastern Division was allied more with pastoral and grazing areas. In short, the main determinant may well have been similarity of rural activity (with the Western Division a special case because of its mining activity).

After the 1966 population census, a new division was formed with the title Hobart Division, comparable with similar capital city divisions in other states; its boundaries were drawn wide enough to encompass the expected expansion of the inner urban area for a period of 20 to 30 years. Apart from this, the broad divisional structure in 1971 was very much the same as it had been in 1919.

In 1972 a new statistical division structure, using the three principal urban centres of influence as a basis, was designed. The three urban centres and their areas of influence



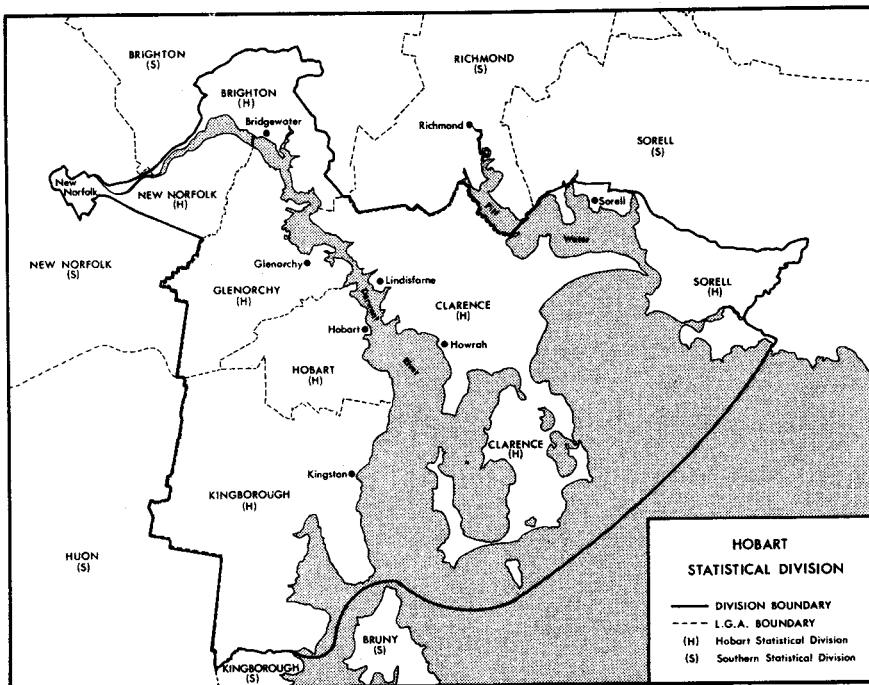
were: (i) Hobart—South and South-East; (ii) Launceston—North and North-East; and (iii) Burnie—Devonport—North-West and West. The following divisional structure was then adopted: (i) with Hobart as focus—Hobart and Southern Divisions; (ii) with Launceston as focus—Northern Division split into Tamar and North Eastern Sub-divisions; and (iii) with Burnie-Devonport as focus—Mersey-Lyell Division split into North Western and Western sub-divisions.

### Outline of the Present Structure

The divisions in the new structure are as follows:

#### *Hobart Division*

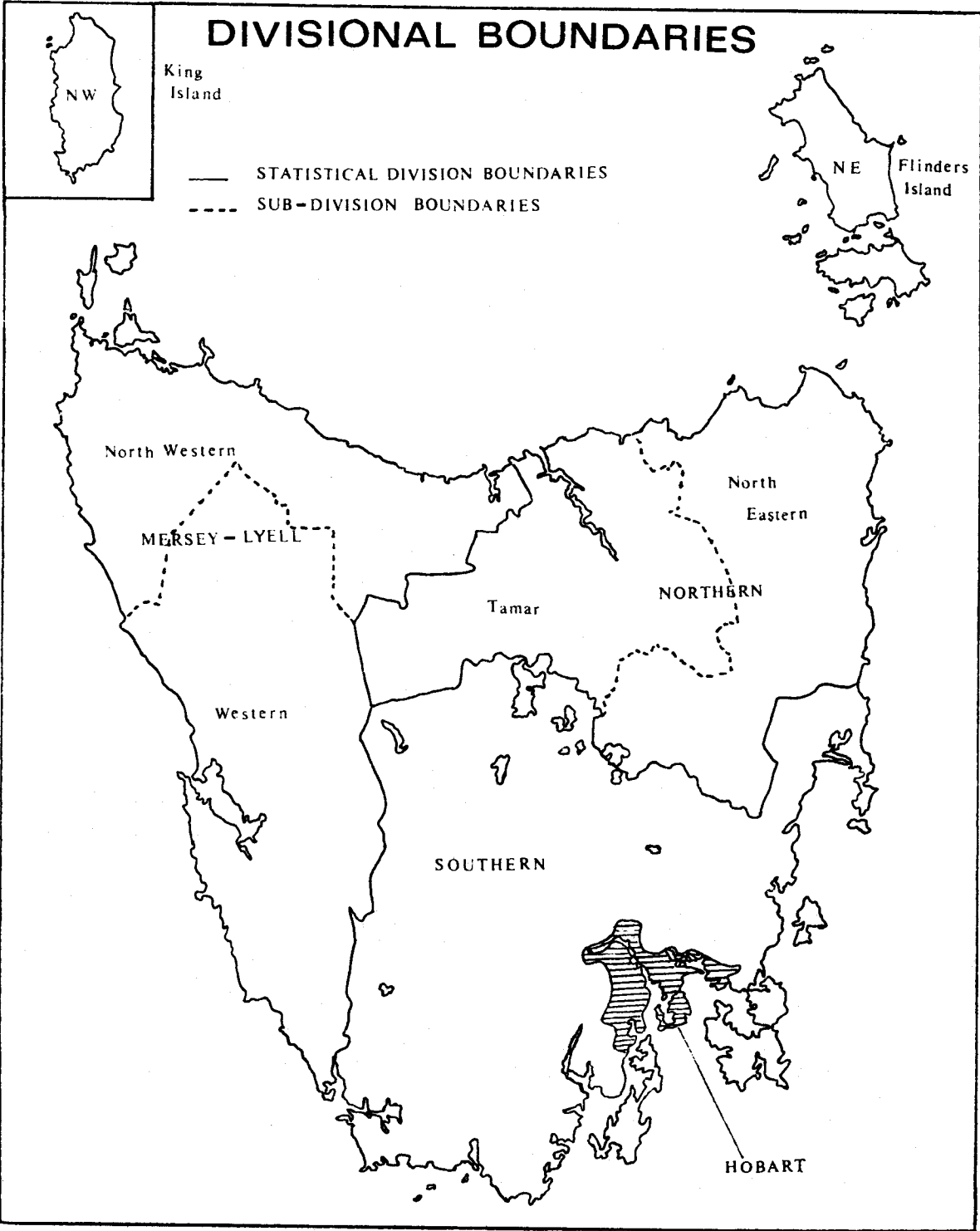
This Division comprises Hobart and Glenorchy Cities, the municipality of Clarence, and parts of four other municipalities: Brighton; Kingborough; New Norfolk; and Sorell. The Division is Tasmania's principal industrial region and the administrative focal point. The Hobart Division boundaries were drawn wide enough to contain the expected outward growth of the inner urban area for a period of 20 to 30 years.

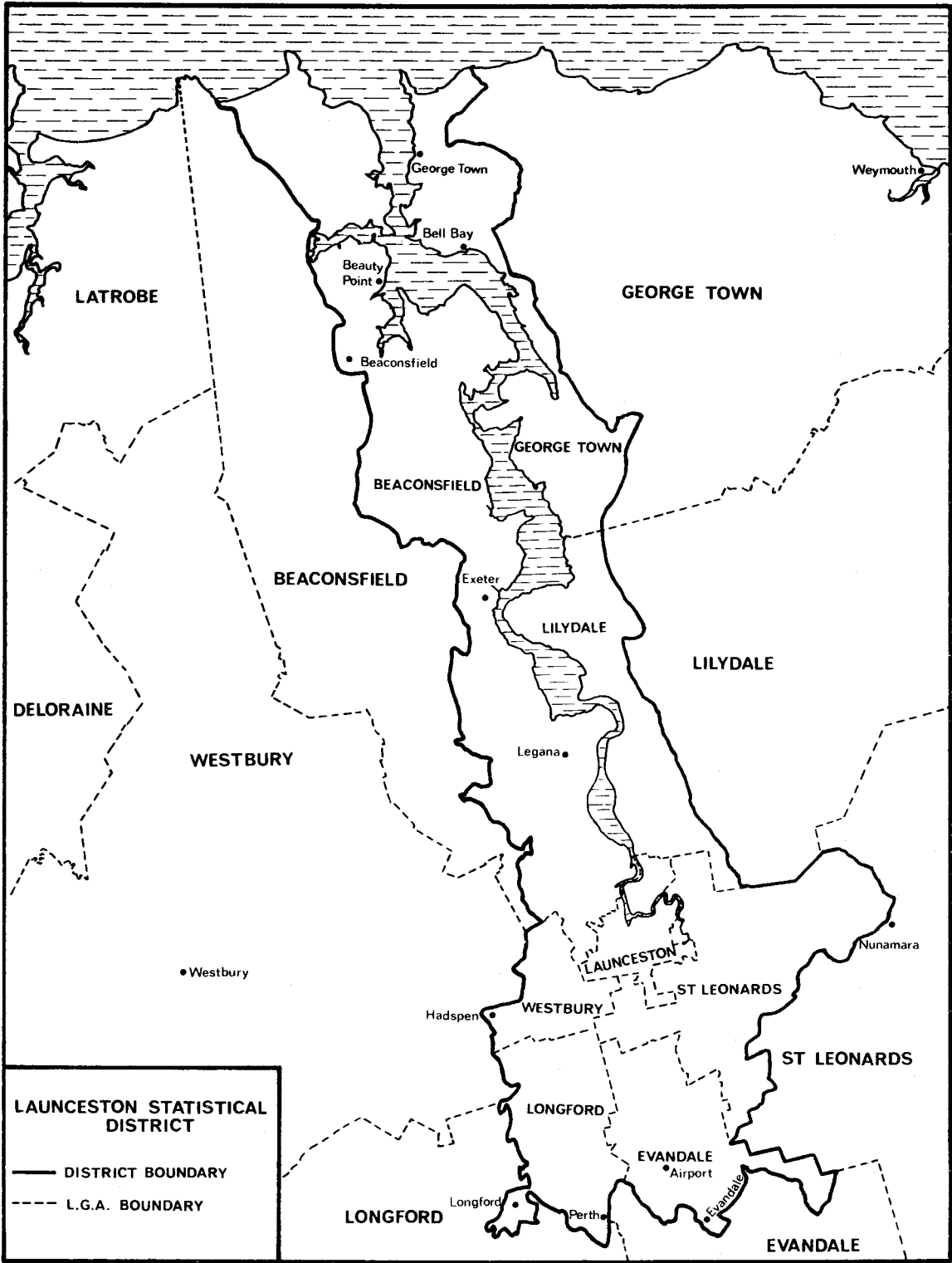


One important component of the Hobart Division is Urban Hobart, defined as the densely settled contiguous parts of the cities of Hobart and Glenorchy, and of the municipalities of Clarence and Kingborough. The boundaries of Urban Hobart and of the Hobart Division do not conform with borders defining local government areas. (The details of these boundaries are given in Chapter 6 'Demography' under 'Populations Centred on Hobart, Launceston and Burnie-Devonport'.)

#### *Southern Division*

Comprises the southern local government authority areas which have Hobart as their urban focus. Predominant activities include orcharding, sheep and cattle grazing, forestry and timber processing.





### Northern Division

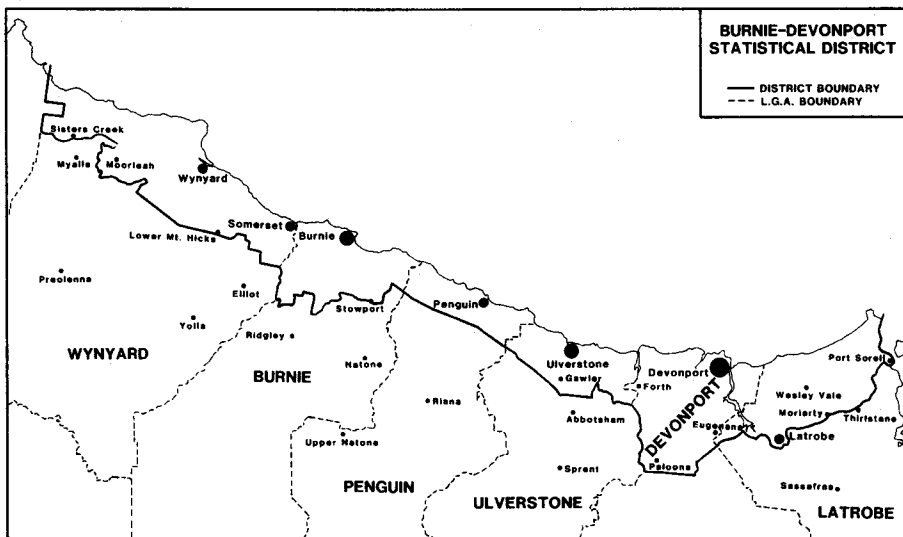
The Northern Division is the region with Launceston as its urban focus.

(i) *Tamar Sub-division*: This is the region dominated by the Tamar Valley. In the centre of this area is Launceston and its suburbs (known as Urban Launceston). This Sub-division includes several major manufacturing industries, port facilities of the northern region and agricultural, pastoral, dairying and forestry industries.

*Launceston Statistical District*: A new boundary delineating the Launceston Statistical District was drawn for the purpose of presenting results of the 1976 Population Census. The boundary was drawn to contain the area of expected urban growth over the next two decades and includes the City of Launceston and parts of seven other municipalities as shown in the accompanying map.

*Urban Launceston* is defined for statistical purposes as the City of Launceston plus the contiguous urban parts of the following municipalities: Lilydale, St Leonards, Evandale, Westbury and Beaconsfield.

(ii) *North Eastern Sub-division*: Comprises the outer seven municipalities of the Northern Division. Principal activities include agriculture, dairying, sheep and cattle grazing, forestry and some mining.



### Mersey-Lyell Division

This division encompasses the north-west and western portions of the State. The region has a twin urban focus of Burnie-Devonport.

(i) *North Western Sub-division*: Comprises the municipalities stretching along Bass Strait from Latrobe to Circular Head plus Kentish and King Island. The Sub-division includes several major manufacturing industries and is a principal agricultural, pastoral, dairying and forestry area for the State.

*Burnie-Devonport Statistical District*: As with the Launceston Statistical District the Burnie-Devonport Statistical District was drawn to contain the area of expected urban growth over the next two decades. It includes the whole of the municipality of Devonport and parts of the municipalities of Wynyard, Burnie, Penguin, Ulverstone and Latrobe.

(ii) *Western Sub-division*: Contains Tasmania's western municipalities where mining activities predominate.

## AREA OF STATE

## Sovereignty

On 17 December 1975, the High Court of Australia announced its decision on an action by the six states challenging the validity of the federal *Seas and Submerged Lands Act*. This Act gives the Federal Government sovereignty over the Australian territorial sea, air space, sea-bed and subsoil; and over the continental shelf beyond the limits of the territorial sea. In their action, the state governments claimed that the sovereign powers given the states over their land mass included sovereignty over the territorial sea adjacent to their coastlines for a distance of at least 4.8 km (3 miles). The full bench of the High Court dismissed the action by the states and upheld the validity of the *Seas and Submerged Lands Act*. Prior to this decision, Tasmania had claimed sovereignty (including mining and fisheries jurisdiction) over an area bound by the approximate rectangle 39° 12' to 45° south latitude and 140° to 150° east longitude.

Since the boundary line between Tasmanian and Victorian sovereignty is defined as 39° 12' south latitude, numerous Bass Strait Islands, the chief being the Furneaux group, King Island and the Fleurieu, Hogan, Curtis and Kent groups, are part of Tasmania. In effect some Tasmanian territory (Rodondo and West Moncoeur Islands) is located only 13 to 16 kilometres from the Victorian coast.

Macquarie Island, site of an Antarctic research station, is also part of the State of Tasmania and is situated in 54° 38' south latitude, 158° 53' east longitude; its area is included in Esperance, a State coastal municipality.

## Area of Major and Minor Islands

The official area of the State of Tasmania including many smaller islands (based on a 1963 survey) is 68 331 square kilometres (6 833 100 hectares). The next table shows the area of the main islands and the municipalities to which they belong:

Area of Islands		
<i>Island</i>	<i>Area (square kilometres)</i>	<i>Municipality</i>
Bruny .....	362	Bruny (a)
King .....	1 099	King Island (a)
Flinders .....	1 374	Flinders (a)
Prime Seal .....	10	Flinders (a)
Badger .....	10	Flinders (a)
Vansittart .....	6	Flinders (a)
Cape Barren .....	445	Flinders (a)
Clarke .....	113	Flinders (a)
Three Hummock .....	70	Circular Head
Hunter .....	74	Circular Head
Robbins .....	101	Circular Head
Maria .....	101	Spring Bay
Schouten .....	34	Glamorgan
Macquarie .....	123	Esperance
Total islands .....	3 922	
Mainland Tasmania .....	64 409	
Total Tasmania .....	68 331	

(a) Island municipality.

## LAND TENURE

## Introduction

Tasmania was proclaimed as Crown property when the first settlers arrived in 1803. In the period since their landing 37.9 per cent of the State's total area has been alienated by grant or sale; the Crown still owns 62.1 per cent.

### National Parks and Wildlife Service

The *National Parks and Wildlife Act 1970* repealed the *Animals and Birds Protection Act 1928* and the *Scenery Preservation Act 1915* and placed the management and control of parks, reserves, fauna and flora in the hands of a single authority, the National Parks and Wildlife Service.

This authority has wide-ranging powers covering the management of parks, protection of fauna and flora, regulation of hunting, protection of Aboriginal relics, conduct of research, dissemination of information about conservation and enforcement of regulations under the *National Parks and Wildlife Act* and *Aboriginal Relics Act*. It is responsible for the planning and management of State Reserves (including national parks, nature reserves, Aboriginal sites and historic sites), game reserves and conservation areas. State reserves are the most highly protected category, in which no other authorities can exercise their powers except with the special approval of Parliament. Conservation areas are set aside for the protection of flora and fauna (though other activities can also occur), while game reserves, a category introduced in 1977, permit controlled hunting of game or commercial species.

The Service is conducting surveys of selected marine areas around Tasmania with a view to the establishment of marine parks and, with the application of the *Federal Historic Shipwrecks Act* to waters off Tasmania in February 1982, became the State agency responsible for implementation of that Act. Through its National Estate Division the Service is also responsible in Tasmania for administration of National Estate grants provided by the Australian Heritage Commission. Specialist advisory committees including representatives of other authorities, community groups and the general public assist the Director and Minister in a number of fields.

The value and significance of the areas managed by the Service are increasing rapidly as the public becomes more conscious of the need for protection of our environment, as pressure for exploitation increases on our finite natural resources and as tourism increases its significance as a major source of income and employment for the State. Pressures for development are unfortunately leading to conflicts over resource use, particularly in relation to our forests and to the south-west of the State. The next few years will be crucial in determining whether the value of our national parks and reserves are fully appreciated and those natural and cultural features which give Tasmania its unique character are to be protected and cherished.

#### State Reserves

The following gives a brief description of the principal State reserves:

**Asbestos Range National Park:** Easily accessible from Launceston and Devonport, this park caters for family recreation. The park extends along the North Coast from Port Sorell to Greens Beach at the mouth of the Tamar. The vegetation includes eucalypt forests and coastal heathlands, as well as grassed areas which provide good grazing for many native animals including the reintroduced forester kangaroo.

**Ben Lomond National Park:** Is located 45 kilometres south-east of Launceston. This high plateau area includes Legges Tor and is Tasmania's principal skiing area. Walking and climbing are other popular activities in this park. The area is geologically interesting as Ben Lomond was the only part of north-east Tasmania to be affected by glaciation.

**Cradle Mountain-Lake St Clair National Park:** This is an area of rugged mountain scenery; it contains Tasmania's highest mountain (Mt Ossa) together with a number of major peaks, numerous lakes, deep gorges and several waterfalls. Flora and fauna in the park are representative of Tasmania's montane species and are in a largely untouched condition. The weather of the area is unpredictable and at times extremely severe—blizzards are common and may occur in mid-summer. The principal walking track extends from Cradle Valley (in the north) to Lake St Clair, a distance of 85 kilometres.

**Franklin-Lower Gordon Wild Rivers National Park:** This park extends from the headwaters of the Franklin River on the boundary of the Cradle Mt-Lake St Clair

National Park in the north to the Olga-Davey divide (Southwest National Park boundary) in the south. It incorporates the former Frenchmans Cap National Park, Lyell Highway State Reserve and Gordon River State Reserve. The Franklin is an undisturbed wild river of world significance and offers a unique canoe or raft trip for some 120 km to Macquarie Harbour through spectacular gorges and ancient rainforest. An important recent archaeological discovery in Kutikina (or Fraser) Cave on the Franklin indicates that man lived in the region at least as long ago as 20 000 years. Cruise boats out of Strahan provide a unique trip for visitors up the Lower Gordon River, featuring magnificent views and remarkable reflections in the River's dark waters. The boundaries of this park were significantly amended in September 1982 to provide for the construction of a hydro-electric scheme on the Gordon-below-Franklin. In 1983 the Federal Government enacted legislation preventing construction of the scheme. The original Wild Rivers National Park, along with the Southwest and Cradle Mt-Lake St Clair National Parks were included in the World Heritage List in December 1982, in recognition of their international significance.

*Freycinet National Park:* This park, situated on the East Coast, occupies the whole of Freycinet Peninsula together with Schouten Island and other offshore islands. A principal feature of the park is the 485 metres high red granite Hazards. The park provides pleasant walking throughout the year, although during summer water may be scarce.

*Hartz Mountains National Park:* Is located south-west of Geeveston. The main features of the park are Hartz Mountain, 1 253 metres high, several small picturesque lakes, and the superb eastward view from Waratah Lookout. The park includes a small sample of wet sclerophyll forest.

*Maria Island National Park:* Is situated off the East Coast from Orford and may be reached by ferry, chartered boat or aeroplane. Principal attractions include convict ruins from two penal settlements, the main one being at Darlington on the north-west corner of the Island. Forester kangaroo, Bennetts wallaby and other Tasmanian fauna have been established on the Island and emu have been introduced. At the north-east corner of the Island high cliffs of richly fossiliferous limestone rise abruptly from the sea.

*Mount Field National Park:* This park, near Maydena and only 75 kilometres from Hobart, is the only southern ski resort in Tasmania and includes spectacular mountain scenery. Principal peaks are Mt Field East and West; other features include Russell Falls, Lake Dobson and numerous glacial lakes and tarns. The track to Russell Falls is a self-guiding nature walk which has been modified to make it accessible to disabled people.

*Mt William National Park:* Bounded on the east by long white sandy beaches of the North-East Coast, this park contains the largest single sample of coastal dry sclerophyll forest found in any reserve. It also contains 11 of the 14 different heath communities of north-eastern Tasmania, and over half the native species of Tasmanian vertebrate animals.

*Port Arthur and Tasman Peninsula:* This historic and scenic area is the best known and most visited tourist attraction in Tasmania. The area, in addition to the historic convict ruins of the Port Arthur penal settlement, contains many small reserves of either historic or scenic significance. Port Arthur, site of a convict settlement from 1830 to 1877, has a number of historic ruins. Recognising the importance of the site, the Federal and State Governments are co-operating in a \$9.2 million conservation program which will assure the future of the numerous buildings and ruins and will provide new insights for visitors into the history of the settlement. Other historic sites include the old convict coal mines at Plunkett Point and Eaglehawk Neck where guards were stationed and a line of dogs tethered to prevent escape from the Peninsula. This area is also renowned for its spectacular coastal landforms, e.g. the Blowhole, Devils Kitchen, Tasman Arch and the Tessellated Pavement.

*Southwest National Park:* Is Tasmania's largest state reserve and covers 442 240 hectares of Tasmania's rugged south-west. It is a true wilderness area and encompasses the Western and Eastern Arthur Ranges, Federation Peak, Frankland Range, Mt Anne, Precipitous Bluff, Lake Pedder, part of the rugged south coast including Port Davey and Bathurst Harbour, and adjacent offshore islands. Dense scrub, which covers much of the



area, frequent harsh weather and a scarcity of cleared tracks make this area the domain of the experienced, self-contained bushwalker.

*Walls of Jerusalem National Park:* This area of sheer dolerite cliffs and tranquil glacial lakes lies in the north-west of the Central Plateau. A walking track climbs up the Fish River Valley from the Mersey Valley and gives access to the Walls area through Herods Gate. The spectacular scenery, plentiful fauna and subalpine flora, make this a very popular bushwalking area. There are two huts and numerous good campsites.

#### *State Reserves, Conservation Areas, and Game Reserves*

The following table lists the Tasmanian national parks, State reserves, historic sites, Aboriginal sites, nature reserves, game reserves and conservation areas. At 30 June 1983 the total area of State and game reserves was 902 215 hectares, while that of conservation areas was 862 173 hectares.

**National Parks, State Reserves, etc. at 30 June 1983**

<i>Name</i>	<i>Area (ha)</i>	<i>Location</i>	<i>Description</i>
<i>National Parks</i>			
Asbestos Range .....	4 281	North coast	Coastal heathland
Ben Lomond .....	16 526	Central north	Mountainous
Cradle Mountain—Lake St Clair .....	131 915	Central	Mountainous, lake
Franklin-Lower Gordon Wild Rivers ...	181 075	West	Mountainous, scenic
Freycinet .....	10 010	East coast	Coastal, red granite
Hartz Mountains .....	6 470	South	Mountainous, scenic
Maria Island .....	9 672	East	Wildlife, convict station
Mount Field .....	16 257	Central south	Mountainous, scenic
Mount William .....	13 806	North east	Forester kangaroo, coastal
Rocky Cape .....	3 070	North west	Coastal heath, banksia
Southwest .....	442 240	South west	Rugged wilderness
Strzelcki .....	4 215	Flinders Island	Mountainous, coastal
Walls of Jerusalem .....	11 510	Central	Subalpine, scenic
<i>State Reserves</i>			
Alum Cliffs .....	1 540	Mole Creek	Scenic gorge and cliffs
Baldock Cave .....	43	Mole Creek	Caves, sclerophyll forest
Bradys Lookout .....	1	West Tamar	River, scenic
Brown Mountain—Remarkable Cave ..	61	Tasman Pen.	Coastal, scenic
Cape Pillar .....	3 200	Tasman Pen.	Coastal, sclerophyll forest
Cape Raoul .....	2 066	Tasman Pen.	Coastal, heath
Croesus Cave .....	47	Central	Caves
Derwent Cliffs .....	5	New Norfolk	Scenic
Devils Gullet .....	146	North	Scenic gorge
Eaglehawk Neck—Taranna .....	25	Tasman Pen.	Coastal, scenic
Eugenana .....	1	North west	Stratified cave deposit
Exit Cave .....	441	South	Large cave, glow worms
Fairy Glade .....	39	Central north	Scenic, fern glade
Ferndene .....	35	North	Scenic, fern glade
Fluted Cape .....	259	Bruny Island	Coastal, sclerophyll forest
North Falls .....	55	North central	Waterfall
Gunns Plains Cave .....	10	North west	Caves
Hastings Caves .....	61	South	Caves, geology
Hellyer Gorge .....	569	North west	Scenic, rainforest
Henty Glacial Moraine .....	1	West	Geology
Holwell Gorge .....	121	Central north	Scenic gorge
Ida Bay .....	425	South East	Scenic reserve, railway
Junee Cave .....	20	Central north	Cave
Kentford Forest .....	37	King Island	Relict eucalypt forest
King Solomon Cave .....	164	Central north	Caves
Kubla Khan Cave .....	160	North central	Caves
Labillardiere .....	2 332	Bruny Island	Coastal, dry sclerophyll forest
Liffey Falls .....	101	North central	Scenic waterfall
Lookout Rock .....	2	East coast	Coastal, scenic
Marakoopa Cave .....	71	North central	Caves, geology

*continued next page*

## National Parks, State Reserves, etc. at 30 June 1983—continued

Name	Area (ha)	Location	Description
<i>State Reserves</i>			
Marriotts Falls .....	121	South central	Waterfall
Mount Arthur .....	4	Tasman Pen.	Scenic lookout
Mount Barrow .....	459	North east	Mountain
Mount Barrow Falls .....	81	North east	Waterfall
Mount Montgomery .....	299	North west	Scenic
Murchison Highway .....	452	West	Scenic road, rain forests
Notley Gorge .....	11	North	Scenic fern gully
Palmers Hill Lookout .....	1	Tasman Pen.	Scenic
Pieman River .....	3 328	West coast	Scenic River
Port Davey .....	17	South west	Scenic foreshore coast
Roger River .....	174	North west	Scenic, rainforest
St Columba Falls .....	314	North east	Waterfall
St Marys Pass .....	273	North east	Scenic road
St Patricks Head .....	150	North east	Scenic
Steppes .....	48	Central	Homestead, dry sclerophyll forest
Stewarts Bay .....	78	Tasman Pen.	Scenic foreshore
Tasman Arch .....	138	Tasman Pen.	Scenic, geology
Tessellated Pavement .....	4	Tasman Pen.	Scenic, geology
The Nut .....	59	North west	Scenic, geology
Thermal Springs .....	1	Central north	Geology
Trowutta Caves .....	66	North west	Caves, limestone arch
Waterfall Creek .....	24	Bruny Island	Scenic, forest
Zeehan—Renison Bell .....	110	West	Scenic road
<i>Historic Sites</i>			
Batchelors grave .....	Small	Taroona	Historic grave
Callington Mill .....	Small	Oatlands	Historic mill
Coal Mines .....	214	Tasman Pen.	Convict mine
Currie Lightkeepers Residence .....	1	King Island	Historic building, museum
161 Davey Street .....	Small	Hobart	Historic home
D'Entrecasteaux Monument .....	Small	South	Historic monument
D'Entrecasteaux Watering Place .....	1	South	Site of early landing
Entally House .....	38	Central north	Historic home
Female Factory .....	Small	Hobart	Historic prison
George III Monument .....	10	South	Memorial to ship wreck, flora
Kangaroo Bluff .....	3	Bellerive	Historic fort
Lyons Cottage .....	Small	Stanley	Historic cottage
Oyster Cove .....	30	South	Aboriginal station
Point Puer—Crescent Bay .....	53	Tasman Pen.	Historic, scenic coast
Port Arthur .....	113	Tasman Pen.	Convict ruins
Richmond Gaol .....	1	Richmond	Convict gaol
Risdon Cove .....	3	Hobart	Sight of first settlement
Ritchies Mill .....	Small	Launceston	Flour water mill
Ross Female Convict Station .....	1	Ross	Convict station
Sarah Island .....	6	Macquarie Harbour	Site of convict station
Shot Tower .....	3	Taroona	Historic tower
Strahan Customs House .....	Small	West coast	Historic building
Sydney Cove .....	53	Furneaux	Historic shipwreck
Tasman Monument .....	Small	Tasman Pen.	Historic monument
Toll House .....	Small	New Norfolk	Historic building
Waubadebars Grave .....	Small	Bicheno	Aboriginal grave
Wybalenna .....	126	Flinders Is.	Aboriginal station
York Town .....	2	North Tamar	Site of early settlement
<i>Nature Reserves</i>			
Albatross Island .....	33	Bass Strait	Seabird breeding
Bass Pyramid .....	Small	Bass Strait	Seal breeding
Betsy Island .....	181	South east	Scientific reference
Big Green Island .....	270	Furneaux	Cape Barren Geese
Black Pyramid Rock .....	40	North west	Seabird rock

continued next page

## National Parks, State Reserves, etc. at 30 June 1983—continued

Name	Area (ha)	Location	Description
<i>Nature Reserves</i>			
Chappell Islands .....	1 350	Furneaux	Bird Islands
Coal River Gorge .....	209	South	Scenic
Curtis Island .....	149	Bass Strait	Ecological reference
Diamond Island .....	5	East coast	Penquin rookery
Dismal Swamp .....	100	North west	Blackwood forest
East Risdon .....	44	Hobart, east	Rare eucalypts
Foster Islands .....	48	North east	Bird islands
George Rocks .....	5	North east	Bird islands
Green Island .....	5	D'Entrecasteaux Channel	Ecological reference
Green Point .....	22	South east	Research station
Hippolyte Rocks .....	5	South east	Seal breeding
Hospital Creek .....	22	South east	Rare endemic plant
Ile des Phoques .....	7	East coast	Seal breeding
Isabella Island .....	25	Flinders	Cape Barren Goose breeding
Judgment Rocks .....	Small	Bass Strait	Seal breeding
Lavinia .....	4 622	King Island	Heath, dunes
Lime Bay .....	1 310	Tasman Pen.	Dry sclerophyll forest
Low Islets .....	8	Furneaux	Australian pelicans
Macquarie Island .....	12 785	Sub Antarctic	Research wildlife
Moriarty Rocks .....	3	Bass Strait	Seal breeding
Native Point .....	127	Tamar	Relict forest
North East Islet .....	Small	Bass Strait	Seal breeding
Penquin Islet .....	4	Hunter Group	Seabird breeding
Reid Rocks .....	Small	Bass Strait	Seal breeding
Rodondo Island .....	80	Bass Strait	Ecological reference
Tenth Island .....	1	Bass Strait	Seal breeding
The Doughboys .....	20	Bass Strait	Seabird breeding
Three Hummock Island .....	7 284	North west	Sclerophyll forest, heath
Three Sisters-Goat Island .....	37	North west	Seagull rookery
Truchanas .....	406	South west	Huon Pine forest
West Moncoeur Island .....	10	Bass Strait	Seal breeding
Wright Rock .....	9	Bass Strait	Seal breeding
<i>Aboriginal Sites</i>			
Mount Cameron West .....	530	West coast	Aboriginal relics
Sundown Point .....	132	West coast	Aboriginal relics
Trial Harbour .....	1	West coast	Petroglyphs
West Point .....	580	West coast	Aboriginal relics
<i>Game Reserve</i>			
Bird Island .....	65	Hunter Group	Muttonbird rookeries
Bruny Island Neck .....	1 450	South	Lagoons, coastal heath
Little Dog Island .....	50	Furneaux	Muttonbird rookeries
New Year Island .....	112	King Island	Muttonbird rookeries
Petrel Island .....	50	Bass Strait	Muttonbird rookeries
Stack Island .....	30	Hunter Group	Muttonbird rookeries
Steep Island .....	30	Hunter Group	Muttonbird rookeries
<i>Conservation Areas</i>			
Wildlife sanctuaries under National Parks and Wildlife Service Management and acquired areas—			
Asbestos Range .....	Small	North coast	(a)
Brigg Islet .....	Small	Furneaux	Bird island
Cat Island .....	30	Furneaux	Bird island
Central Plateau .....	23 250	Central	Alpine vegetation
Chalky Island .....	36	Furneaux	Bird island
Cockle Creek .....	41	South	(a)
Cradle Mountain-Lake St Clair .....	4	North	(a)
Egg Islands .....	128	Huon	Estuarine, wetland
Fluted Cape .....	190	South	(b)
Gull Island .....	32	Furneaux	Bird island

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## National Parks, State Reserves, etc. at 30 June 1983—continued

Name	Area (ha)	Location	Description
<i>Conservation Areas</i>			
Highfield .....	4	Stanley	Early homestead (c)
Lackrana .....	220	Flinders Island	Lagoons
Lake Sorell .....	198	Central	Sclerophyll forest
Lavinia .....	258	King Island	(d)
Liffey Falls .....	7	North central	(b)
Logan Lagoon .....	2 256	Flinders Island	Coastal
Medeas Cove .....	81	North east	Estuarine, marsh
Mile Island .....	8	Furneaux	Bird island
Moulting Lagoon .....	512	East	Brackish lagoon
Night Island .....	10	Furneaux	Bird island
Oakleigh Creek .....	756	North central	Nothofagus forest
Oyster Rocks .....	10	Furneaux	Bird islands
Port Arthur .....	12	Tasman Pen.	(e)
Port Cygnet .....	81	South	Foreshore
Reef Island .....	10	Furneaux	Bird island
Risdon Cove .....	70	Hobart	(e)
Seal Rocks .....	127	King Island	(b)
South Esk River .....	142	North Midlands	River, scenic
Tamar River .....	4 600	North	Estuarine, waterfall
Tathams Lagoon .....	13	King Island	Freshwater lagoon
Wright and Egg Islands .....	10	Bass Strait	Bird islands
Wybalenna Island .....	3	Furneaux	Bird island
<i>Muttonbird Reserves</i>			
Babel Island .....	445	Furneaux	Muttonbird hunting ground
East Kangaroo Island .....	142	Furneaux	Muttonbird hunting ground
Great Dog Island .....	377	Furneaux	Muttonbird hunting ground
Hunter Island .....	7 365	North west	Muttonbird hunting ground
Little Green Island .....	89	Furneaux	Muttonbird hunting ground
Outer and Inner Sister Islands .....	1 012	Furneaux	Muttonbird hunting ground
<i>Wildlife Sanctuaries Under Joint Management With Other Authorities</i>			
Badger Corner .....	333	Flinders Island	Foreshore and marine
Beaufront .....	157	Midlands	Deer, Forester kangaroo
Ben Lomond .....	2 665	North east	Wet sclerophyll forest
Burnie Fernglade .....	44	North west	Fern gully
Cape Contrariety .....	4	South east	Muttonbird rookery
Cape Direction .....	5	South east	Muttonbird rookery
Cape Portland .....	663	North east	Waterfowl habitat
Carr Villa .....	62	Launceston	Modified sclerophyll forest
Chauncy Vale .....	357	East central	Dry sclerophyll forest
Deal Island .....	1 623	Bass Strait	Island, grassland
Deloraine .....	2	North central	Riverine, waterfowl
Derwent River .....	1 568	South east	Estuarine, river, marsh
Four Mile Creek .....	607	North	Estuarine, flats
Fulton Park .....	34	North	Scout camp
Glenorchy Water Reserve .....	712	Hobart, west	Dry sclerophyll forest
Goose Island .....	97	Furneaux	Bird island
Grimes Lagoon .....	173	Midlands	Freshwater lagoon, birds
Goulds Lagoon .....	8	Hobart, north	Brackish lagoon, birds
Henry Somerset Orchid .....	39	North	Orchid flora
Kingston Golf Course .....	61	Kingston	Dry sclerophyll forest
Lake Dulverton .....	217	Oatlands	Freshwater lagoon, birds
Launceston Golf Course .....	61	Launceston	Dry sclerophyll forest
Mount Pleasant .....	66	Launceston	Dry sclerophyll forest
Paterson Island .....	16	North central	Modified sclerophyll forest
Patriarchs .....	101	Flinders	Cape Barren Geese
Pipers River .....	162	North east	Riverine
Punchbowl .....	24	Launceston	Modified sclerophyll forest
Reekara .....	2 428	King Island	Heathland tea tree
Sandspit River .....	550	East coast	Estuarine, marsh, birds
Scottsdale, NE Park .....	16	North east	Modified wet sclerophyll forest

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National Parks, State Reserves, etc. at 30 June 1983—*continued*

Name	Area (ha)	Location	Description
<i>Wildlife Sanctuaries Under Joint Management With Other Authorities</i>			
Sea Elephant River .....	1 186	King Island	Coastal dunes, heath
Southport Lagoon .....	3 556	South east	Coastal lagoon
Southwest .....	777 151	South west	Scenic wilderness
St Clair Lagoon .....	255	South central	Lagoon
The Lea .....	150	South	Scout camp
Tooms Lake .....	22 663	East central	Lake, dry sclerophyll forest
Wayatmah Lagoon .....	1 809	South central	Storage reservoir
Woodstock Lagoon .....	20	North	Waterfowl habitat

(a) To be added to a national park.

(d) To be added to a nature reserve.

(b) To be added to a State reserve.

(e) To be added to an historic site.

(c) To be proclaimed an historic site.

*NOTE: Sclerophyll forest:* The term *sclerophyll* means 'hard leaved'. Most Australian forests are dominated by trees (usually eucalypts) and shrubs which have thick, hard leaves—an adaption to the dry Australian environment.

## CLIMATE OF TASMANIA

(The following section was prepared by the Bureau of Meteorology)

## Introduction

Since Tasmania lies between 40° and 43½° south of the Equator and is an island with no point more than 115 kilometres from the sea, its climate is classified as temperate maritime. On the coast the daily temperature range averages about 8° Celsius, rising to about 12° Celsius further inland, indicating a slight continental effect.

The combination of mountainous terrain in the western half of the State and prevailing westerly winds produce a marked west-east variation of climate, and especially of rainfall.

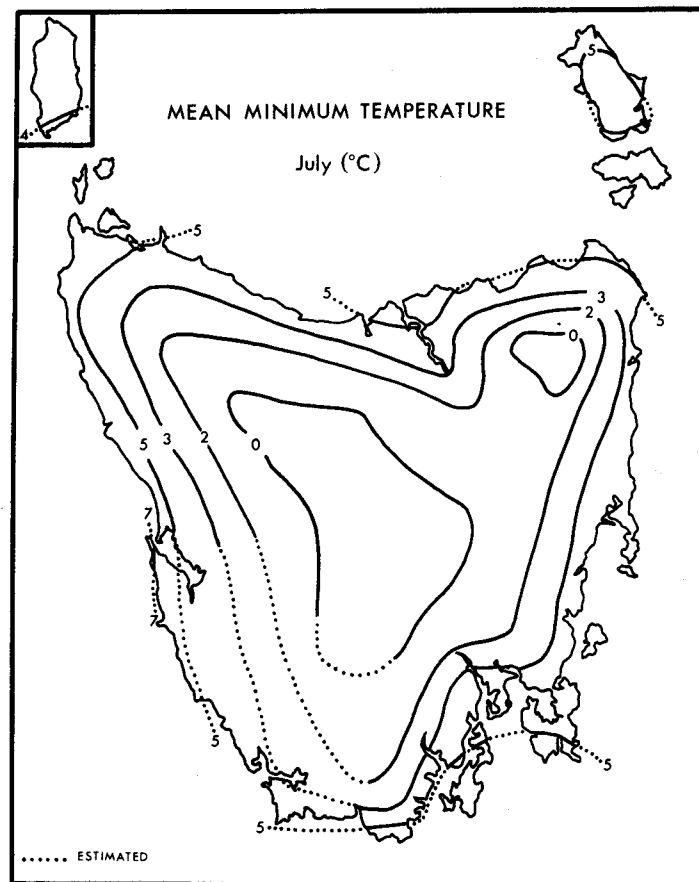
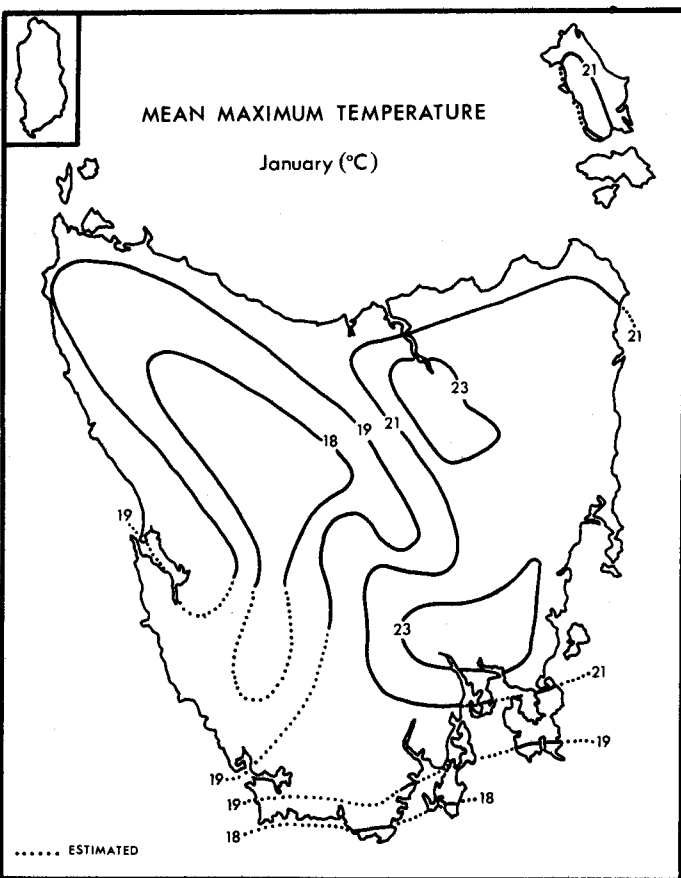
Summers are mild and characterised by greatly lengthened days. The sun reaches a maximum elevation of 70-73° in mid-summer, giving 15 hours of daylight in the north and 15½ hours in the south. In mid-winter, the sun's elevation does not exceed 20-23°, and the shortest day consists of 9¼ hours of daylight in the north, falling to slightly under nine hours in the south.

In winter, westerly winds reach their greatest strength and persistence, causing a distinct maximum in rainfall distribution in the west and north-west. In the east and south-east, rainfall is more evenly distributed throughout the year. In comparison with those areas of Europe and North America which are at similar latitudes Tasmania enjoys a very temperate climate. This is due to the stabilizing effect of surrounding oceans whose temperatures change only 3-5° throughout the year. The higher proportion of ocean to land area confers a similar benefit on the Southern Hemisphere as a whole.

## Winds

The prevailing winds over most of the Island are north-west to south-west, with greatest strength and persistence during late winter. Speed and direction vary with the eastward passage of high and low pressure systems. In the summer months, when westerlies are weak, afternoon sea-breezes become the predominant wind in coastal areas. Occasional periods of north-east to south-east winds occur.

The highest average wind speeds are associated with extensive deep depressions over ocean areas south of Tasmania.



### Temperature

Except under very stable conditions, temperature decreases with height at the rate of about  $1^{\circ}\text{C}$  per 100 metres. Hence, in a mountainous island like Tasmania the isotherms (lines of equal temperature drawn on a map) will be much influenced by topography. Greater cloud cover over the western half, a result of the persistent westerlies, further decreases day-time temperatures in the west, while the Fohn effect warms and dries the westerly airstreams as they descent to the Midlands, the East Coast and south-east districts.

The incidence of frosts is affected markedly by topography, the valleys acting as natural channels for the drainage of cold air at night. Widespread severe frosts are experienced in winter on the Central Plateau and in upland valleys. Inland centres below 300 metres are virtually frost-free only in summer, while the North Coast, the east and south-east have few frosts after early October. Above 300 metres there is no frost-free month.

Tasmania only occasionally experiences the extremes of temperature common to the other states. High temperatures recorded in the east and south-east of Tasmania generally occur on the last day of a warm spell during which a dry air mass of mainland origin is advected over the State from a direction between north and north-west. Some cooling in the lower air layers over the waters of Bass Strait prevents the northern coast from reaching the higher temperatures that are experienced in the south under these conditions. The highest temperatures ever recorded in Tasmania are  $40.8^{\circ}\text{C}$  at Bushy Park in December 1945 and at Hobart in January 1976. The lowest temperature recorded was  $-13.0^{\circ}\text{C}$  at Shannon, Butlers George and Tarraleah in June 1983.

The recorded extremes of temperature for Hobart are  $40.8^{\circ}\text{C}$  in January 1976 and  $-2.8^{\circ}\text{C}$  in June 1972 and July 1981. Readings above  $38^{\circ}\text{C}$  or below  $-1^{\circ}\text{C}$  are rare, the mean maximum temperature in summer being  $21^{\circ}\text{C}$  and the mean minimum in winter,  $4.8^{\circ}\text{C}$ .

The mean maximum temperature for January and the mean minimum temperature for July over Tasmania are shown in the two accompanying maps. The mean maximum is the average of daily maxima for January; the mean minimum the average of daily minima for July.

### Rainfall

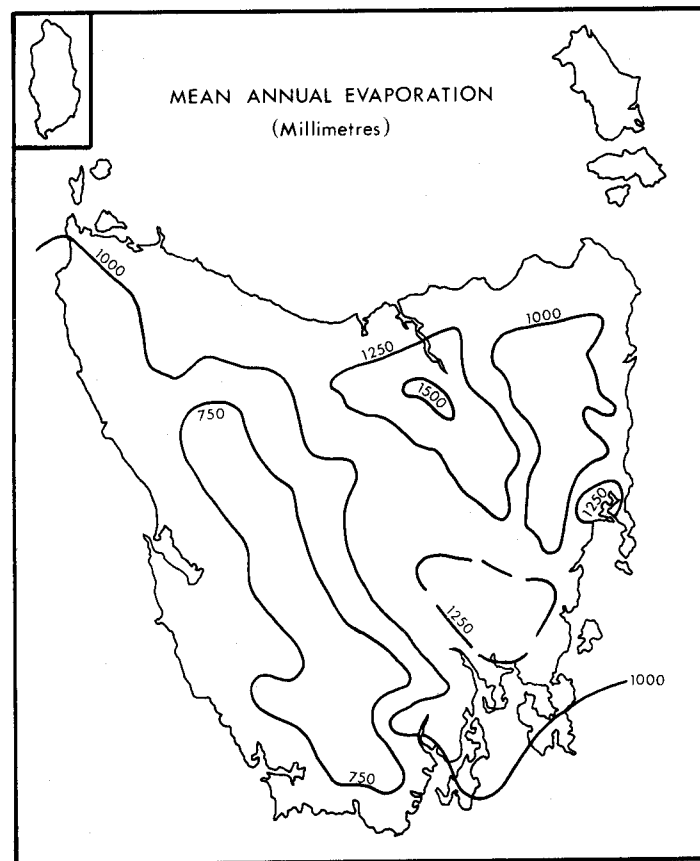
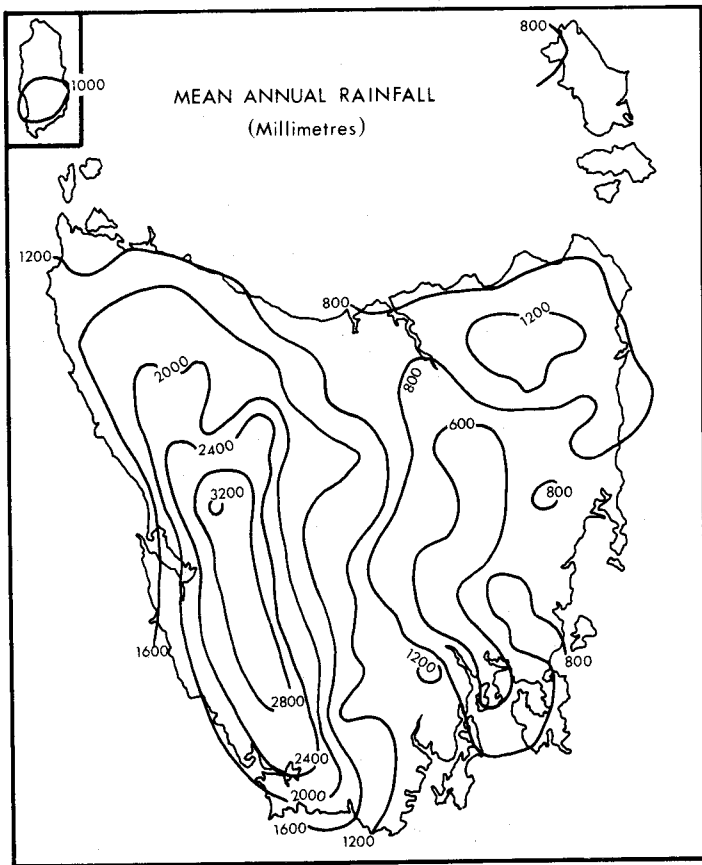
As Tasmania's position is on the northern edge of the 'Roaring Forties' (a westerly air-stream), its exposure to this stream and the mountainous nature of the terrain are the controlling influences on the amount, distribution and reliability of the State's rainfall.

In the west, average annual rainfall ranges from about 1 500 mm on the coast to 3 500 mm at Lake Margaret; in the north-east, from 500 mm on the coast to 1 300 mm on the highlands; while rainfall in the north-west ranges from 1000 mm near the coast to 1 600 mm in the higher inland areas.

Extreme three to five-day rainfalls occur most often on the West Coast in late June when the westerlies are increasing in strength and persistence and the sea temperature is well above the land temperature. In the north, short periods of extreme precipitation occur when wind flow is sustained for up to two days from the north-east, usually from late autumn to spring. The high moisture content of such streams from over the relatively warm waters of the Tasman Sea results in heavier, if less prolonged, rainfall than is produced in the westerly streams.

There is a strong gradation in rainfall from west to east, because of topography, with a distinct rain shadow east of the Central Plateau. Parts of the Midlands average less than 500 mm per year. Totals in the east and south-east are higher (over 800 mm on exposed slopes).

Rainfall is least reliable in the east, south-east, Midlands and Derwent Valley. Highest rainfall in these areas tends to occur in autumn and spring, under the influence of small cyclonic depressions off the East Coast.





Effective rainfall is the amount necessary to compensate for evaporation, begin germination and maintain plant growth above wilting point. Average rainfall is sufficient for this purpose from May to September. From October to January the chance of receiving effective rainfall decreases, except in the west and north-west, where the probability is usually better than 50 per cent. In the Midlands, the Derwent Valley, the south-east and east, and in the northern inland, the chance of receiving at least effective rainfall during the summer months is very small.

The average annual rainfall distribution over Tasmania is shown on an accompanying map.

### **Snow and Hail**

Snow and hail can be experienced over the highlands at any time of the year. Heaviest snowfalls occur, as a rule, in late winter and spring, and less frequently in June and July. Extensive snow below 150 metres occurs, on the average, less than once every two years, associated with an unusually vigorous outbreak of cold air from Antarctic regions. There is no permanent snowline, but patches of snow often remain on the highest peaks until December.

Hail is most likely in spring, though possible in any month. Hail storms are a big risk to fruit crops in the Huon Valley and on the Tasman Peninsula, and sometimes cause extensive damage.

### **Thunderstorms**

These are most common in the west and about the North Coast and are usually associated with the lifting of warm moist air by a cold front. Thunderstorms occur mainly in the summer months. Hobart and Launceston average five to seven storms per year, and the north and north-west, 10 to 15. The Central Plateau and north-eastern highlands report, on average, about five storms per year, while the Midlands, as gauged by Oatlands, has less than three.

### **Floods**

In Tasmania the river system most affected by flooding is the South Esk. The Esk catchment includes most of the north-eastern highlands, where annual rainfall averages about 1 300 mm, and part of the Western Tiers where run-off can be rapid. As many rivers in the South Esk system flow through flat country, flooding can be widespread and disruptive.

Flooding of the Derwent River system can be extensive but is less frequent than in the South Esk. The most severe flood on record in the Derwent occurred in April 1960 with the peak discharge flow recorded as 3 400 cumecs (cubic metres per second) at Macquarie Plains. However, it is most unlikely that flooding of this severity will again occur on the Derwent due to the completion of four dams across the River since 1960 by the Hydro-Electric Commission.

Flooding of rivers in the west and south of the State can be of greater frequency than in the Derwent and Esk systems but because of mountainous terrain and lack of population these pass mostly unnoticed. Similarly, the short, fast-flowing rivers of the East Coast flood and fall rapidly, but can cause damage and disruption to road systems.

On two occasions in 1974 torrential rain caused severe flooding in the north-east of Tasmania. There was widespread damage to property, serious damage to road systems and high stock losses in the floods which occurred less than two months apart.

In the north and north-west of Tasmania many rivers have their catchments along the northern edge of the Central Plateau and can flood quickly.

### **Humidity**

The mean relative humidity at both 9.00 a.m. and 3.00 p.m. exceeds 50 per cent at all stations in all months of the year. Relative humidity is generally higher in the morning than in the afternoon, and higher in coastal regions than inland. Days of high temperature

combined with uncomfortably high humidity are rare. In the east, south-east, and Fingal Valley, warm dry winds from a west or north-west direction may occasionally have a relative humidity as low as 10 per cent.

### **Droughts and Bushfires**

Although Tasmania has the highest average rainfall of any state in Australia, drought conditions are not unknown. Unlike the remainder of Australia, droughts in this State tend to be highly localised and of reasonably short duration. The most severe effects are usually felt over a period of only a few months, but serious rainfall deficiencies can extend over a period of two or three years. The most severe long term droughts occurred during the periods 1888-1889, 1897-1898, 1918-1920, 1933-1934, 1945-1946, 1949-1952, 1967-1969, 1972-1973 and 1979-1982.

Serious bushfires occurred in 1898, 1915, 1946, 1951, 1967 and 1981. The bushfires of 7 February 1967 were the most severe in the State's history causing 62 deaths and damage to property estimated to be in excess of \$25m. The worst fires on the West Coast occurred during February 1981 with property damage around Zeehan estimated to be near \$5m.

### **Evaporation**

Evaporation depends mainly on wind strength, the moisture deficit of the airstream and on sunshine. The World Meteorological Organisation has asked for standardisation of measurement of evaporation by use of the Class 'A' pan (a galvanised pan, 1.22 metres in diameter and 25.4 centimetres deep) which gives higher figures for evaporation than those obtained from the containers previously used in Australia (Class 'A' pan figures should be multiplied by a factor of about 0.80 to obtain the average potential evapotranspiration likely for Tasmanian crops). The last map gives details for mean annual evaporation.

At Launceston Airport the annual evaporation is just under 1 500 mm due largely to the prevalence of winds coming from the Western Tiers, which become warmer and drier in their descent to the lower Midlands and Tamar areas, thus increasing evaporation. Monthly evaporation at Launceston Airport has ranged as high as 270 mm in summer but drops to between 25 and 40 mm in winter. This area of high evaporation extends southward to the lower Derwent and Huon areas. The lowest evaporation rate occurs in the Central Plateau, West Coast Ranges and south-west areas where annual evaporation may fall to less than 750 mm. This is due to the high moisture content of the prevailing westerlies and the high average cloud cover. In these areas the monthly evaporation rate may range from about 125 mm in January to only 12 mm in June and July.

Another area of low evaporation (below 1 000 mm a year) is located in the North-East Highlands.

### **Sunshine**

The average number of hours of sunshine a year ranges from about 2 500 hours in the northern Midlands to less than 1 750 hours on the West Coast and western highlands, this area having the least amount of sunshine in Australia. Hobart averages 2 100 hours per year and Launceston around 2 400.

In January, daily averages of sunshine range from nine hours per day between the Midlands and Launceston to six hours per day on the West and South Coasts. In mid-winter, average daily sunshine is down to a maximum of three hours on the East Coast and to considerably less on the West Coast and highlands.

### **The Climate of Hobart**

*Temperatures:* Mean maximum temperature exceed 21°C in January and February. On average there are two or three days per year with maximum temperatures greater than 32°C. Only once, in February 1968, have three successive days over 32°C been recorded in Hobart. Minimum temperatures below -1°C are rare.

**Rainfall:** There is a strong gradient of rainfall to the immediate west of Hobart caused by the bulk of Mt Wellington. On the south-eastern slopes of the mountain the annual rainfall reaches 1 400 mm (at The Springs and The Gap) while at Fern Tree the annual average is 1 140 mm. The rainfall decreases to about 600 mm in the city area, the annual average being 626 mm at the Regional Office of the Bureau of Meteorology. Some eastern shore suburbs receive as little as 500mm of rain per annum.

Monthly totals are fairly uniform. The wettest 12 months on record at the Bureau's Hobart Office yielded 1 104 mm (to December 1916) and the driest, 320 mm (to November 1943).

**Relative Humidity:** Highest humidity is at the time of lowest temperature, in the early morning during winter. As temperatures rise to 3.00 p.m., humidity decreases by 15-20 per cent. The seasonal variation is not great, although the average humidity during the winter months is 70 to 75 per cent and during the summer months 58 per cent. Periods of high humidity combined with high temperatures are rare.

**Fog:** Fogs occur in the city about four times per year, in the cooler months, but are more frequent over and near the Derwent River, down which they are often carried on a light north-west wind. Fog frequency is far less than that for either Launceston or Melbourne.

**Wind:** The main wind direction is north-west, induced by the orientation of the Derwent Valley. Next in importance is the sea-breeze (from south or south-east) during summer months.

The strongest wind gust experienced in Hobart was 150 km/h recorded during a storm in September 1965.

**Snow and Hail:** Snow below 300 metres occurs, on the average, less than once per year. Falls lying in the centre of the city, almost at sea level, have occasionally been recorded. Snow generally lies on Mt Wellington during winter and early spring months, but it is rare between November and March. Hail occurs about four times a year, mainly between September and November.

**Frost:** The average annual frequency of days of frost is 28, mostly from June to August. None has been recorded in January. Cold air drainage is found in the hilly suburbs and frosts are common on the valley floors.

**Sunshine and Cloud:** No marked seasonal variation of cloud amount occurs but a strong dependence on time of day is evident. During April to September cloud cover is greater in the afternoon and from October to March it is greater in the morning.

A clear-cut seasonal variation in monthly average hours of sunshine also occurs with amounts varying from 231 hours in January to 111 hours in June.

**Climatic Data:** The next table gives the main climatic data for Hobart and a comparison between the 1982 and long-term average rainfall conditions:

Hobart Climatic Data							
Month	Shade temperature				Mean daily hours of sunshine (a)	Rainfall	
	Mean maxima (a)	Mean minima (a)	Extremes (b)			1982	Long- term average (a)
			Maximum	Minimum			
	°C	°C	°C	°C	hours	mm	mm
January .....	21.4	11.7	40.8	4.5	7.9	36.2	48
February .....	21.5	11.9	40.2	3.4	7.1	24.6	41
March .....	20.0	10.7	37.3	1.8	6.3	76.8	48
April .....	17.1	8.9	30.6	0.6	5.1	12.2	53
May .....	14.2	6.9	25.5	− 1.6	4.2	57.4	48

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## Hobart Climatic Data—continued

Month	Shade temperature				Rainfall		
	Mean maxima (a)	Mean minima (a)	Extremes (b)		Mean daily hours of sunshine (a)	1982	Long-term average (a)
			Maximum	Minimum			
June .....	11.8	5.2	20.6	-2.8	3.9	35.0	58
July .....	11.5	4.5	21.0	-2.8	4.3	35.4	53
August .....	12.8	5.2	24.5	-1.8	5.0	9.0	51
September .....	14.9	6.3	28.2	-0.6	5.8	63.6	52
October .....	16.8	7.6	33.4	0.0	6.3	8.6	62
November .....	18.5	9.1	36.8	1.7	6.9	25.2	56
December .....	20.2	10.6	40.7	3.3	7.3	14.2	56
Total for year ..	..	..	..	..	..	398.2	626

(a) Long-term average.

(b) Specific extreme temperatures since records kept.

The next table compares Hobart climatic data with that of other Australian cities:

## Capital Cities Climatic Data

	Sydney	Melbourne	Brisbane	Perth	Adelaide	Hobart	Darwin	Canberra
Temperature (°C)—								
Mean daily max. .	21.4	19.9	25.4	23.2	22.4	<b>16.7</b>	32.3	19.3
Mean daily min. .	13.6	9.9	15.5	13.1	11.8	<b>8.2</b>	23.2	6.2
Extreme max. ....	45.3	45.6	43.2	44.7	47.6	<b>40.8</b>	40.5	42.2
Extreme min. ....	2.1	-2.8	2.3	1.2	0.0	<b>-2.8</b>	10.4	-10.0
Mean daily hours of sunshine .....	6.7	5.7	7.5	7.9	6.9	<b>5.9</b>	8.5	7.2
Rainfall—								
Mean annual (mm) .....	1 215	661	1 157	879	531	<b>626</b>	1 536	639
Mean annual days of rain .....	148	143	123	120	120	<b>162</b>	97	110
Wind—								
Average (km/h) ..	11.6	12.3	10.8	15.6	12.5	<b>11.6</b>	9.2	5.8

## The Climate of Launceston

Being over 50 km from the coast, Launceston exhibits a slight continental effect — greater seasonal and daily variation of temperature and lower rainfall as compared with stations on the coast.

**Temperature:** Average maximum temperature exceeds 24°C in January and February, 21°C in December and March, and 12°C in June and July. Average minimum is about 11°C in summer, falling below 4°C in winter. Freezing temperatures are common during winter mornings, the lowest recorded being -6°C. Up to 50 frost days are to be expected in a year, mostly from May to August. Light frosts may occur in summer.

**Rainfall:** The annual average is 720 mm. The wettest month is July (84 mm) while February and March, the driest months, each receive less than half this amount. The wettest month on record is August 1936 (254 mm). Annual totals range from 467 mm (1908) to 1 057 mm (1946). Some severe thunderstorms are experienced. Snow does not settle in Launceston, but falls occur on surrounding hills.

**Relative Humidity:** Seasonal and daily variations are similar to those for Hobart but the daily readings are 5 to 10 per cent higher.

*Fog:* Occasions of high humidity, associated with moist north-east airstreams, are relatively frequent. Fog occurrence averages more than 30 days a year, mostly between May and August.

*Winds:* The NW-SE orientation of the Tamar Valley has a marked effect on surface winds, which conform mainly to these directions. The north-west wind is often reinforced in the afternoon by a sea-breeze from much the same direction. Strong winds are most common during the colder half of the year and severe squalls can occur in association with thunderstorms.

### Rainfall Statistics

#### Meteorological Districts

Tasmania is divided into nine meteorological districts (not to be confused with statistical divisions) with fairly well-defined land use patterns appropriate to each. The following table shows rainfall totals of each district for recent years:

Rainfall of Tasmania in Districts (Millimetres)				
Period	Northern	King Island	Central Plateau	Midlands
	Crops, dairying, forestry	Grazing, dairying	Grazing (mainly sheep)	
1976 .....	839	1 095	905	519
1977 .....	903	994	989	511
1978 .....	926	875	1 002	557
1979 .....	1 045	1 048	973	427
1980 .....	944	772	989	412
1981 .....	943	700	1 132	555
1982 .....	699	561	840	377
District average (a) .....	1 000	939	988	548

Period	Derwent Valley	South East	East Coast	West Coast	Flinders Island
	Fruit growing, grazing, forestry		Grazing, mining, forestry	Mining	Grazing
1976 .....	618	888	831	2 306	699
1977 .....	612	709	710	2 456	615
1978 .....	684	752	880	2 194	823
1979 .....	692	603	601	2 522	703
1980 .....	760	719	658	2 565	658
1981 .....	722	796	768	2 362	764
1982 .....	574	652	565	2 138	574
District average (a) .....	682	753	819	2 338	741

(a) Long-term annual average based on 70 years of record.

#### Rainfall at Selected Stations and Rainfall Index by Districts

The table below shows the annual rainfall for selected stations over the last five years:

**Annual Rainfall at Representative Stations**  
(Millimetres)

<i>Station</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>Long-term average (a)</i>
Avoca .....	527	668	453	474	562	395	560
Beaconsfield .....	869	951	1 003	960	927	703	955
Burnie (APPM) .....	866	1 067	1 143	963	980	743	1 014
Campbell Town .....	528	582	443	397	547	387	550
Cressy Research .....	647	653	553	546	597	456	640
Deloraine (Goderick) ...	917	872	995	896	793	626	972
Franklin .....	702	827	683	914	874	616	897
Hobart (Weather Bureau) .....	495	608	390	464	548	398	626
Hobart (Airport) .....	484	511	353	385	483	336	553
Kettering .....	798	809	n.a.	n.a.	856	663	881
Launceston (Airport) ...	632	687	616	600	652	422	708
Lilydale .....	930	857	930	1 015	1 044	690	978
Lymington .....	711	768	661	713	767	578	790
Maydena .....	1 219	1 107	1 173	1 401	1 313	1 010	1 234
New Norfolk .....	396	n.a.	n.a.	453	559	372	552
Oatlands .....	463	529	443	434	572	355	563
Queenstown .....	2 576	2 515	2 645	2 800	2 422	2 302	2 528
Ringarooma .....	1 086	1 250	1 226	1 175	1 206	822	1 236
Savage River .....	n.a.	1 693	2 108	2 001	1 824	1 561	1 976
Smithton .....	1 118	1 109	1 342	1 094	1 124	817	1 109
St Helens .....	706	968	531	635	675	571	782
St Marys .....	872	1 193	816	838	1 038	654	1 028
Swansea .....	468	715	333	456	598	403	614
Triabunna .....	553	710	376	478	613	375	659
Ulverstone .....	872	954	1 033	911	923	763	966

(a) Number of years of record used to calculate the long-term average varies from station to station.

The next table gives details of a rainfall index for meteorological districts for recent years. The index shows the actual rainfall for a district expressed as a percentage of 'normal' rainfall (where 'normal' rainfall or the 'distinct average' is the mean for the 70-year period 1913-1982, i.e. the long-term average based on 70 years of record—details relating to annual rainfall and annual district average 'normal' rainfall are shown in an earlier table).

**Rainfall Index by Districts, Tasmania**  
(Index showing actual rainfall expressed as a percentage of 'normal' (a) rainfall)

<i>Period</i>	<i>Meteorological district</i>							
	<i>Northern</i>	<i>King Island</i>	<i>Central Plateau</i>	<i>Midlands</i>	<i>Derwent Valley</i>	<i>South-east</i>	<i>East Coast</i>	<i>West Coast</i>
1976 .....	83	115	92	94	78	123	100	102
1977 .....	90	105	100	92	90	93	86	105
1978 .....	92	92	101	100	100	99	106	94
1979 .....	104	110	99	77	102	80	73	108
1980 .....	94	81	115	75	111	95	80	110
1981 .....	94	74	114	100	106	105	94	101
1982 .....	69	59	85	68	84	86	68	91

(a) 'Normal' rainfall is the mean for the 70-year period 1913-1982.

**Seasonal Temperatures**  
**Temperatures at Selected Stations, Tasmania, 1982**  
 (°C)

Station	Maximum temperatures		Minimum temperatures		Mean temperatures	
	Mean for 1982 season (a)	Departure from normal (b)	Mean for 1982 season (c)	Departure from normal (b)	Mean for 1982 season	Departure from normal (b)
<i>Summer (December to February)</i>						
Hobart .....	21.8	+0.8	12.5	+1.2	17.1	+1.0
Launceston						
Airport .....	24.0	+1.7	10.0	+0.4	17.0	+1.0
Cape Bruny ....	18.8	+1.1	11.7	+0.8	15.2	+1.0
Devonport .....	21.1	0.0	11.8	+0.3	16.4	+0.2
New Norfolk ..	23.4	+0.6	10.8	+0.2	17.1	+0.4
Oatlands .....	22.4	+1.3	9.0	+1.1	15.7	+1.2
St Helens .....	23.7	+1.7	12.2	+1.2	17.9	+1.4
Savage River ..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Queenstown ....	20.8	-0.1	8.8	+0.7	14.8	+0.3
<i>Autumn (March to May)</i>						
Hobart .....	17.5	+0.4	9.4	+0.7	13.4	+0.5
Launceston						
Airport .....	18.2	+1.0	7.0	+0.3	12.6	+0.6
Cape Bruny ....	15.8	+0.5	9.8	+0.4	12.8	+0.4
Devonport .....	17.5	-0.1	9.1	+0.2	13.3	0.0
New Norfolk ..	18.3	+0.7	6.7	-0.5	12.5	+0.1
Oatlands .....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
St Helens .....	19.5	+1.1	8.4	+0.8	13.9	+0.9
Savage River ..	15.0	+0.3	n.a.	n.a.	n.a.	n.a.
Queenstown ....	16.8	-0.1	7.0	+1.0	11.9	+0.5
<i>Winter (June to August)</i>						
Hobart .....	12.6	+0.6	4.9	0.0	8.7	+0.3
Launceston						
Airport .....	11.5	+0.2	1.8	-0.9	6.6	-0.3
Cape Bruny ....	11.8	+0.5	6.6	+0.4	9.2	+0.5
Devonport .....	12.7	0.0	3.9	-0.5	8.3	-0.2
New Norfolk ..	11.4	-0.1	1.9	-0.6	6.6	-0.3
Oatlands .....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
St Helens .....	14.4	+0.7	3.0	-0.2	8.7	+0.3
Savage River ..	9.7	-0.1	3.4	-0.5	6.5	-0.3
Queenstown ....	12.1	0.0	2.7	+0.1	7.4	0.0
<i>Spring (September to November)</i>						
Hobart .....	17.8	+1.1	8.1	+0.5	12.9	+0.8
Launceston						
Airport .....	17.1	+0.8	4.8	-0.8	10.9	0.0
Cape Bruny ....	14.7	-0.1	7.6	-0.1	11.1	-0.1
Devonport .....	15.7	-0.7	7.1	-0.1	11.4	-0.4
New Norfolk ..	19.9	+2.8	5.5	-0.8	12.7	+1.0
Oatlands .....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
St Helens .....	19.1	+1.5	6.7	+0.1	12.9	+0.8
Savage River ..	14.0	+0.8	5.6	+0.2	9.8	+0.5
Queenstown ....	15.5	-0.2	5.3	+0.1	10.4	0.0

(a) Average of maximum daily temperatures for season.

(b) 'Normal' is the mean for the season averaged for the available years of record.

(c) Average of minimum daily temperatures for season.

The mean temperature for any locality can give a false impression, e.g. a mean temperature of 25°C based on a maximum of 50°C and a minimum of 0°C, all in the one day. A better way of examining a locality's climate is to take the maximum temperature each day and average these readings for each season; similarly, to take the minimum temperature each day and average these readings for each season. These mean maxima and mean minima then give an indication of the daily variation that may be expected. The above table shows the mean maximum and mean minimum temperatures for nine selected stations in summer, autumn, winter and spring.

### Monthly Weather Review — 1983

#### *January*

Most of January experienced very unseasonable weather with all districts except the West Coast recording below and well below average rainfall. Early in the month gale force north westerly winds occurred over most of the State, and snow fell in the Central Plateau. Mean maximum and minimum temperatures were below normal for all parts of the State.

#### *February*

All districts received well below average rainfall. Mean maximum temperatures were 1-3°C above normal at all recording stations with mean minimum temperatures also above normal at most stations.

#### *March*

Above average rainfall in the east, north and south of the State and near average falls over the west. Flooding occurred in the South Esk. Most of the State reported near normal mean maximum temperatures and near or above normal mean minimum temperatures for the month.

#### *April*

Cloudy skies resulted in near or slightly below normal temperatures for April. Maximum and minimum temperatures were below normal over most of the State. The heaviest rains, although below normal, occurred on the West Coast. All areas of the State except the west and south-west recorded above normal rainfall.

#### *May*

Below normal rainfall occurred over the State with only isolated exceptions while temperatures were above normal in all areas.

#### *June*

June brought cold conditions to Tasmania, particularly during the last week of the month, when an exceptionally long and severe cold spell occurred, setting new records in several areas. This cold spell was accompanied by unusually heavy snowfalls, especially on the West Coast and in the south-east corner. Rainfall was again below average in the north-east half of the State, but well above average in the south-west half.

#### *July*

Rainfall for most of the State was well below average. The driest districts were the Midlands, Flinders Island, West Coast and Central Plateau where rainfall deficiency exceeded 50 per cent. Maximum temperatures were close to normal with minimum temperatures generally a little below normal. Snow fell on the highlands.

#### *August*

All districts except Flinders Island and the South-west Coast recorded below average rainfall. Temperatures in all areas were above average. Some light snow fell on the higher peaks.

#### *September*

September saw an improvement in the rainfall situation in most areas of the State with monthly registrations grading from slightly below normal in the north-west corner,



to very much above normal in the south-east. There were two periods of particularly severe weather, from the 12th to the 15th and from the 19th to the 23rd, with snow, hail, storm force winds and very cold temperatures.

#### **October**

Following a brief cold outbreak in the first few days of the month temperatures returned to normal. Rainfall was generally below average but with some heavy falls in the east and south-east. Winds were mostly moderate. Light snow and hail fell on the south-west and central plateau at the beginning of the month. Some minor flooding occurred in northern rivers.

#### **November**

Temperatures were generally normal. Northern and east coastal districts had slightly below average rainfall while western, central and southern districts had above average rainfall. A cold outbreak mid-way through the month brought widespread snowfalls to western, central and southern areas above 700 metres.

#### **December**

December was a very dry month with all districts having well below normal rainfall. Mean monthly minimum and maximum temperatures were mostly above normal. On the 20th the daily maxima reached 37°C in Hobart and Swansea.

## **ENVIRONMENTAL CONTROL**

### **Department of the Environment**

Established in October 1972, the Department of the Environment is headed by a Director of Environmental Control who is responsible to the Minister for the Environment. Staff include a number of scientific experts who are responsible for particular aspects of pollution control and investigations—chemists, noise control investigators, air and water pollution officers and a waste management officer.

The *Environment Protection Act* 1973 gives the Director the general duties of: (i) protecting the State's environment; (ii) ensuring the control or prevention of any act or emission which causes or may lead to pollution; and (iii) co-ordinating all necessary activities (government or private) to protect, restore or improve Tasmania's environment. In addition to the general duties the Act also confers the following more specific functions on the Director: (i) consider means and initiate steps for the protection of the environment and for the prevention, control, abatement or mitigation of pollution; (ii) carry out investigations into environmental protection problems; (iii) obtain advice from experts in the field of environmental protection; (iv) review progress made in attaining objectives of the Act and publicise steps taken to protect the environment; (v) advise on pollution standards and methods of sampling and testing for pollutants; and (vi) promote and co-ordinate planning projects for environmental protection.

*Coverage of the Act:* In the case of inconsistencies the *Environment Protection Act* 1973 prevails over the provisions of all other Acts with two exceptions: (i) *Oil Pollution Act* 1961; and (ii) *Public Health Act* 1962. Since provisions of the *Environment Protection Act* would intrude into various sectors of existing legislation, the *Statute Law Revision (Environment Protection) Act* 1973 was introduced concurrently. The effect of this statute was to amend the Criminal Code, the *Local Government Act* 1962, the *Mining Act* 1929, the *River Pollution Act* 1881, the *Hydro-Electric Commission Act* 1944 and the *Water Act* 1957 to conform with the *Environment Protection Act* 1973.

Staff of the Department of the Environment continually visit most areas of Tasmania either monitoring or investigating complaints and pollution problems. Departmental officers have attended interstate seminars and conferences and visited other environment protection authorities for exchange of information. The Department participates in the work of the Australian Environment Council and has staff on a number of the Council's committees. In addition the Department is represented on the committee of the Keep

Australia Beautiful Council. The Department is also represented on State Government inter-departmental committees which deal with environmental matters. Environmental seminars and lectures have been organised by the Department and special papers written dealing with the environment.

**Oil Pollution Control:** In 1978 an appointment was made to the position of State Oil Pollution Control Officer within the Department. The Tasmanian supplement to the National Plan to combat the pollution of the sea by oil has been up-dated and published. A State Oil Pollution Committee has also been formed to function under the National Plan with the following functions: (i) to be a source of information and advice to the Government through the Marine Pollution Committee on matters of oil pollution; and (ii) to operate in combating any actual incident.

#### **Environment Protection Advisory Council**

The 1973 legislation also provided for the creation of the Environment Protection Advisory Council. Under the chairmanship of the Director of Environmental Control the Council has members drawn from government and private sectors and representing a number of diverse interests; e.g. the mining, secondary, rural and forestry industries, conservation groups, the Hydro-Electric Commission, trade unions, public health, etc. The council's task is to advise the Minister and make recommendations to the Government on environmental matters. The Council is empowered to appoint committees to investigate specific subjects. Committees appointed are—Noise Committee, Waste Committee, Air Committee and the Water Committee. As a result, regulations covering all the above pollution subjects have been promulgated.

An Intensive Animal Husbandry Committee was set up in August 1975 to deal with pollution problems posed by this industry. Guidelines have been issued to operators and local government authorities setting out design and operation procedures to control pollution problems in the industry.

#### **Environmental Impact Studies**

The State Government has adopted a policy that requires public authorities to undertake environmental impact studies before proceeding with any development which may have a significant effect upon the State's environment. Responsibility for ensuring that such studies are performed rests with the decision-making authority. Co-ordination and evaluation of environmental impact studies are performed by the Director of Environmental Control.

Scope of an environmental impact study includes:

- (i) a statement of the major objective of the proposed project;
- (ii) an analysis of the technological likelihood of achieving the objective;
- (iii) a statement of alternative practical plans for achieving the objective;
- (iv) an outline of existing characteristics of the environment prior to implementation of the development project;
- (v) separate reports on alternative practical engineering plans for achieving the goal; and
- (iv) an assessment of the probable effect of the project upon the environment.

Such a study is to be used by the proposing body in determining environmental safeguards. For the Director of Environmental Control a study will provide a basis for review of the safeguards and for making recommendations for further protective measures.

#### **Further References**

DAVIES, J. L. (ed.) *Atlas of Tasmania* (Land and Survey Department, Hobart, 1965).  
*Monthly Weather Review, Tasmania* (published monthly by the Bureau of Meteorology, Hobart).





*TASMANIAN PREMIERS*

*T. Reibey (20.7.1876 - 9.8.1877)*

*P.O. Fysh (9.8.1877 - 5.3.1878 and 29.3.1887 - 17.8.1892)*

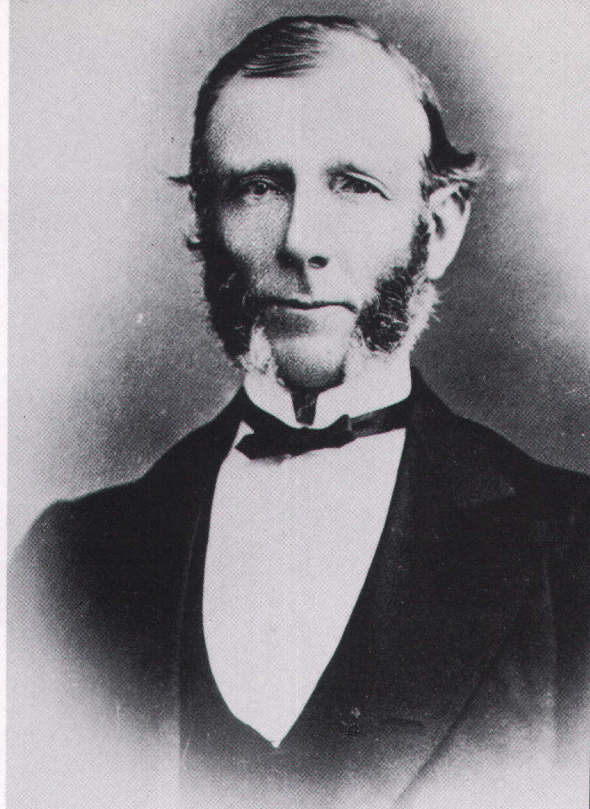
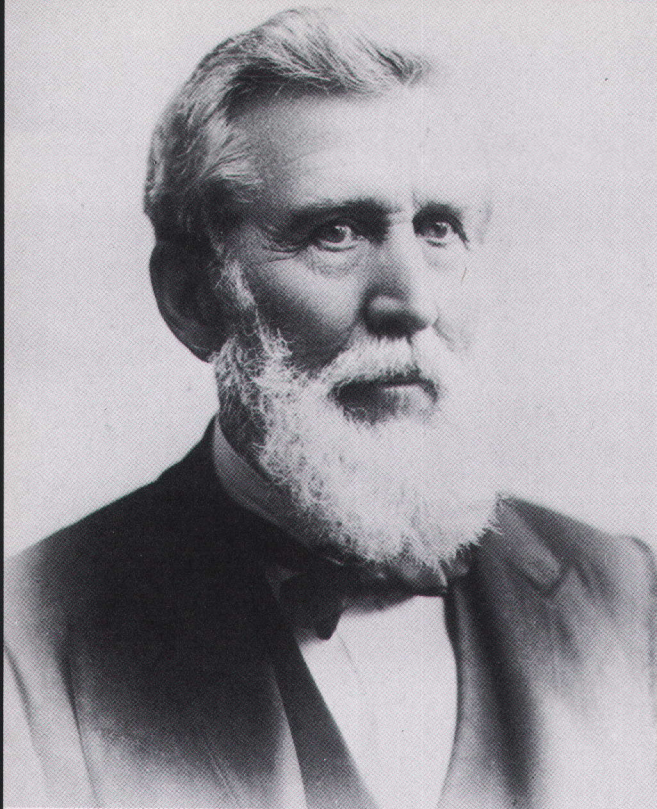
*[Allport Library and Museum of Fine Arts, Hobart]*



*J. Giblin (5.3.1878 - 20.12.1878 and 30.10.1879 - 15.8.1884)*

*W.L. Crowther (20.12.1878 - 30.10.1879)*



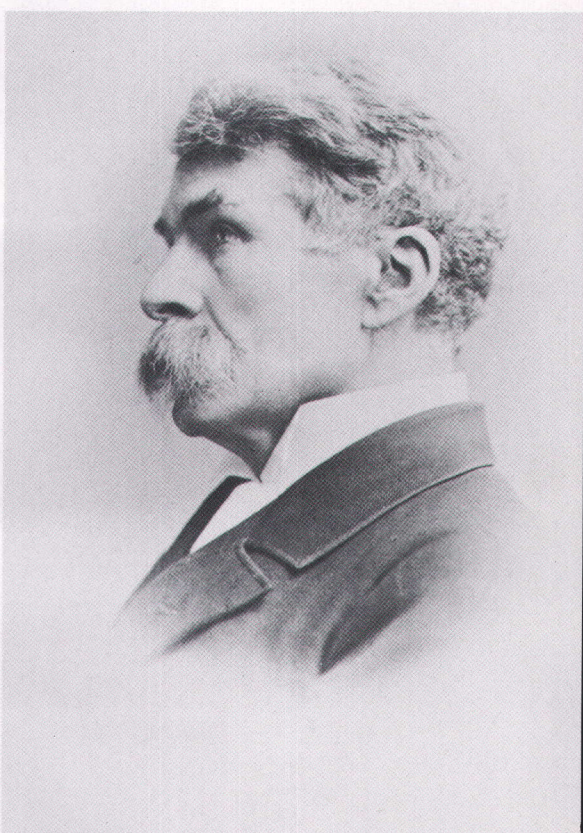


*TASMANIAN PREMIERS*

*A. Douglas (15.8.1884 - 8.3.1886)*

*J.W. Agnew (8.3.1886 - 29.3.1887)*

*[Allport Library and Museum of Fine Arts, Hobart]*



*H. Dobson (17.8.1892 - 14.4.1894)*

*E. Braddon (14.4.1894 - 12.10.1899)*



## CHAPTER 3

### GOVERNMENT AND ADMINISTRATION

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## Chapter 3

### GOVERNMENT AND ADMINISTRATION

#### Introduction

Government in Tasmania is exercised at three levels:

- (i) The Federal Government, with authority based on a written constitution, and centred in Canberra;
- (ii) the State, with residual powers, and centred in Hobart; and
- (iii) the cities and municipalities, with authority derived from State acts, and operating in 49 sub-divisions of the State.

This chapter deals primarily with the State Government and with Tasmanian representation in the Federal Parliament. The administration of the cities and municipalities is described in Chapter 5, 'Local Government'. A more detailed outline of the Tasmanian system of government is included in the 1976 and earlier editions of the *Year Book*.

#### TASMANIAN REPRESENTATION IN FEDERAL PARLIAMENT

The Federal Parliament consists of the Queen, a Senate and a House of Representatives. The Queen is represented in Australia by the Governor-General.

#### The House of Representatives

Representation in the House of Representatives is based upon the general principle of having, as nearly as practicable, electorates with equal numbers of electors. This is only possible if regular electoral redistributions are implemented. The following table indicates the state of the House of Representatives at the elections immediately following electoral redistribution and/or passage of legislation creating additional electorates:

Membership: House of Representatives

Year	NSW	Vic.	Qld	WA	SA	Tas.	NT (a)	ACT (b)	Total
1948 .....	28	20	10	5	6	5	1	—	75
1949 (c) ..	47	33	18	8	10	5	1	1	123
1955 (c) ..	46	33	18	9	11	5	1	1	124
1969 (c) ..	45	34	18	9	12	5	1	1	125
1974 .....	45	34	18	10	12	5	1	2	127
1977 (c) ..	43	33	19	10	11	5	1	2	124
1980 .....	43	33	19	11	11	5	1	2	125

(a) Representative in House since 1922; full voting rights granted 1969.

(b) Representative in House since 1949; full voting rights granted 1966.

(c) Election following an electoral redistribution.

#### Elections for the House of Representatives

Australia is currently divided into 125 single-member electorates and electors are required to cast a vote for every candidate standing within the electorate in order of their preference. Election of members is carried out in accordance with the principles of the absolute majority through use of the alternative vote (see 'The Legislative Council—Preferential Voting' for a description of similar electoral principles). If a vacancy occurs in the House of Representatives, it is filled by holding a by-election in the electorate

concerned. Elections for the House of Representatives must be held at least every three years.

The following table lists the Tasmanian members of the House of Representatives elected on 5 March 1983 together with the office address, party affiliation and electorate of each member:

**Tasmanian Members of the House of Representatives**

<i>Member</i>	<i>Office address</i>	<i>Party affiliation</i>	<i>Electoral division</i>
Burr, M. A.	55 Cameron Street, Launceston 7250	Liberal	Wilmot
Goodluck, B. J.	Marine Board Bldg, 1 Franklin Wharf, Hobart 7000	Liberal	Franklin
Groom, Hon. R. J.	Cnr Cattley & Wilson Streets, Burnie 7320	Liberal	Braddon
Hodgman, Hon. W. M.	Marine Board Bldg, 1 Franklin Wharf, Hobart 7000	Liberal	Denison
Newman, Hon. K. E.	42 St John Street, Launceston 7250	Liberal	Bass

### The Senate

In the Senate, each state is represented by ten senators and, in addition, the Australian Capital Territory and the Northern Territory have been represented by two senators each since the election of 13 December 1975. Each senator's term is normally six years, as half the senate seats come up for election every three years. In accordance with the *Senate Representation of Territories Act*, senators from the Northern Territory and ACT are elected for the term of the House of Representatives. However, in the case of a double dissolution of both Houses, half the senators are elected for a six-year term (the first five elected in each state) and half for a three-year term.

In Senate elections each state is an electorate. Electors are required to cast a vote for every candidate standing within the state in order of their preference. Election of members is carried out in accordance with the principles of proportional representation by the single transferable vote (see 'Elections for the House of Assembly' later in this Chapter for a description of similar electoral principles).

If a vacancy occurs in the Senate, the appropriate state government nominates a replacement, of the same political affiliation, who sits until the next general election (either for the House of Representatives or for the Senate), when an election is held to fill the vacancy. If a senator fills such a vacancy through an election held at the same time as an election for the House of Representatives, his term will be the same as if the vacating member's term were to run its full course. If the vacant seat is contested at an ordinary Senate election, then six, instead of the normal five candidates, will be elected in the state affected and the senator last elected will fill the vacancy for a term shorter than the full six years.

The following table lists the Senators for Tasmania elected on 5 March 1983, their office address, party affiliation and year of retirement:

**Tasmanian Senators**

<i>Senator</i>	<i>Office address</i>	<i>Party affiliation</i>	<i>Year of retirement</i>
Archer, B. R.	15 Wilmot Street, Burnie 7320	Liberal	1985
Coates, J.	CGC, 188 Collins Street, Hobart 7000	ALP	1985
Grimes, Hon. D. J.	18 Paterson Street, Launceston 7250	ALP	1988
Harradine, R. W. B.	Marine Board Bldg, 1 Franklin Wharf, Hobart 7000	Independent	1988
Hearn, J. M.	27 Brisbane Street, Launceston 7250	ALP	1985
Rae, P. E.	55 Cameron Street, Launceston 7250	Liberal	1988
Tate, M. C.	32 King Street, Devonport 7310	ALP	1988
Townley, M.	AMP Bldg, 86 Collins Street, Hobart 7000	Liberal	1985
Walters, M. S.	Marine Board Bldg, 1 Franklin Wharf, Hobart 7000	Liberal	1988
Watson, J. O. W.	46 St John Street, Launceston 7250	Liberal	1985

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**Federal Government Departments and Instrumentalities in Tasmania (a)**


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- Aboriginal Affairs — Department of, 80 Elizabeth Street, Hobart. *Tel.* 20 5011  
*Officer-in-Charge:* B. Lindsay
- Administrative Services — Department of, Commonwealth Government Centre. *Tel.* 20 5011  
*Chief Property Officer:* I. M. Preston
- Advisory Council for Inter-Government Relations, 110 Hampden Road, Hobart. *Tel.* 30 8011  
*Acting Director:* Dr Balmer
- Attorney-General's Department, Commonwealth Government Centre. *Tel.* 20 5011  
*Deputy Crown Solicitor:* W. D. Baker
- Auditor-General's Office, 86 Collins Street, Hobart. *Tel.* 20 5011  
*Chief Auditor:* F. Self
- Australian Archives, 4 Rosny Hill Road, Rosny. *Tel.* 44 0111  
*Regional Director:* R. Middleton
- Australian Broadcasting Corporation, 171 Macquarie Street, Hobart. *Tel.* 30 9903  
*Manager for Tasmania:* J. D. Marshall
- Australian Bureau of Statistics, Commonwealth Government Centre. *Tel.* 20 9555  
*Deputy Commonwealth Statistician and Government Statistician of Tasmania:* D. N. Allen
- Australian Electoral Office, 86 Collins Street, Hobart. *Tel.* 20 5011  
*Australian Electoral Officer:* J. R. Lennard
- Australian Federal Police, Magnet Court, Sandy Bay. *Tel.* 23 5844  
*Chief Inspector:* P. M. Connell
- Australian Postal Commission, GPO Hobart. *Tel.* 20 7027  
*State Manager:* J. D. Cowling
- Australian Taxation Office, Commonwealth Government Centre. *Tel.* 20 5011  
*Deputy Commissioner:* M. J. McHugh
- Australian Telecommunications Commission, 47 Liverpool Street, Hobart. *Tel.* 20 8111  
*State Manager:* D. J. Robinson
- Aviation — Department of:  
Hobart Airport. *Tel.* 48 5041  
*Airport Director:* C. Harris  
Launceston Airport. *Tel.* 003 91 8288  
*Airport Director:* P. Doyle
- Communications — Department of, 162 Macquarie Street, Hobart. *Tel.* 20 5011  
*State Manager:* H. Melling
- Conciliation and Arbitration Commission, 45 Murray Street, Hobart. *Tel.* 20 5011  
*Deputy Industrial Registrar:* I. McLeod
- Defence — Department of, Anglesea Barracks, Hobart. *Tel.* 20 0141  
*Regional Secretary:* E. E. Rodwell, MM  
RAAF Support Unit, 8 Fitzroy Place, Sandy Bay. *Tel.* 23 4222  
*Senior Air Force Officer, Tasmania:* Wing Commander P. J. C. Wagner, ADC  
Army Office, Anglesea Barracks, Hobart. *Tel.* 20 0141  
*Commander, Sixth Military District:* Colonel J. G. Hughes, AM  
Naval Staff Office, 1 Franklin Wharf, Hobart. *Tel.* 20 0141  
*Naval Officer Commanding, Tasmania:* Commander M. T. E. Shotter, ADC, RAN
- Education and Youth Affairs — Department of, Commonwealth Government Centre. *Tel.* 20 5011  
*Director:* G. J. Aubert
- Employment and Industrial Relations — Department of, 45 Murray Street, Hobart. *Tel.* 20 5011  
*Regional Director:* N. P. Harrigan
- Family Court of Australia, 65 Murray Street, Hobart. *Tel.* 34 2466  
*Registrar:* W. Court
- Finance — Department of, Commonwealth Government Centre. *Tel.* 20 5011  
*Director:* C. M. Hollingsworth
- 

*continued next page*

## Federal Government Departments and Instrumentalities in Tasmania (a)—continued

- 
- Foreign Affairs — Department of, Commonwealth Government Centre. *Tel.* 20 5011  
*Senior Foreign Affairs Representative:* J. Buckie
- Health — Department of, 2-8 Kirksway Place, Battery Point. *Tel.* 20 5011  
*Acting Director:* C. Phillips
- High Court of Australia, Franklin Square, Hobart. *Tel.* 30 8022  
*District Registrar:* J. Dale
- Home Affairs and Environment — Department of, *see* Australian Archives
- Housing and Construction — Department of, 162 Macquarie Street, Hobart. *Tel.* 20 5011  
*Controller:* E. Hazeldine
- Immigration and Ethnic Affairs — Department of, Commonwealth Government Centre. *Tel.* 20 5011  
*Regional Director:* P. E. Thomson
- Industry and Commerce — Department of, 19 Davey Street, Hobart. *Tel.* 30 1201  
*Collector of Customs:* N. E. Petering
- Medibank, 77 Collins Street, Hobart. *Tel.* 34 7999  
*State Manager:* J. McArdle
- Ombudsman, 23 Kirksway Place, Battery Point. *Tel.* 34 9200  
*Ombudsman:* C. R. Woodhouse
- Primary Industry — Department of, 162 Macquarie Street, Hobart. *Tel.* 20 5011  
*Regional Director:* S. Bailey
- Public Service Board, Commonwealth Government Centre. *Tel.* 20 5011  
*Regional Director:* K. R. Scanlon
- Reserve Bank of Tasmania, 111 Macquarie Street, Hobart. *Tel.* 30 1301  
*Manager for Tasmania:* W. M. Gordon
- Science and Technology — Department of,  
 Analytical Laboratory, Channel Highway, Kingston. *Tel.* 29 0389  
*Director:* K. Wilson  
 Antarctic Division, Channel Highway, Kingston. *Tel.* 29 0209  
*Director:* C. McCue  
 Meteorology — Bureau of, 20 Ellerslie Road, Hobart. *Tel.* 23 2834  
*Regional Director:* E. F. Phillips
- Social Security — Department of, Commonwealth Government Centre. *Tel.* 20 5011  
*Director:* I. Fletcher
- Trade Practices Commission, 1 Franklin Wharf, Hobart. *Tel.* 34 5155  
*Acting Regional Director:* B. J. Newport
- Trade — Department of, 162 Macquarie Street, Hobart. *Tel.* 20 5011  
*Regional Director:* P. McNamara
- Transport — Department of, Surface Transport Group, 11 Elizabeth Street, Hobart. *Tel.* 20 5011  
*Assistant Director:* J. St. A. Hartley
- Trans Australia Airlines, 4 Liverpool Street, Hobart. *Tel.* 38 3511  
*Manager:* B. T. Kearns
- Veterans' Affairs — Department of, 2-8 Kirksway Place, Battery Point. *Tel.* 20 5011  
*Deputy Commissioner:* J. E. Brotherson, MBE
- 

(a) As at 6 December 1983.

NOTE: The Commonwealth Government Centre is located at the corner of Harrington and Collins Streets, Hobart. All principal offices shown above are within the 002 STD area unless otherwise indicated.

## TASMANIAN GOVERNMENT

## Division of Power

Under the *Commonwealth of Australia Act 1900*, the State of Tasmania surrendered part of its sovereignty and it was possible, at that point in time, to classify the totality of powers to be vested in the Commonwealth Government and the State as follows:

- (i) exclusive powers to be exercised by the Federal Government alone;
- (ii) concurrent powers to be exercised both by the Federal Government and the State (subject to the supremacy of Federal Government law in cases of inconsistency); and
- (iii) residual powers to be exercised by the State.

Since Federation there have been considerable changes in functions actually performed by the two governments due to constitutional amendments and to inter-governmental agreements affecting function. It will suffice, therefore, to list the main fields of activity of the Commonwealth Government today:

Foreign affairs and diplomatic representation; maintenance of the armed forces; customs and excise; posts and telegraphs; control of broadcasting and television; control of civil aviation; repatriation of ex-servicemen; immigration; industrial arbitration for national industries; control of coinage and currency; overseas trade promotion; employment service; age, invalid and widows' pensions; national health benefits; federal territories and overseas dependencies; census and statistics; meteorological service; federal courts and police; control of banking; collection of sales and income taxes; housing assistance and defence service homes; scientific and industrial research; management of state and national debt; lighthouses and navigation; Australian territorial sea and sea-bed. (The Constitution of the Commonwealth of Australia is reprinted in Chapter 1 of *Year Book, Australia, 1977-1978* (Cat. No. 1301.0).)

The departments, authorities, etc. of the Tasmanian Government are listed in a later section of this chapter headed 'Departments.'

## The State Governor

Tasmania follows British tradition and accepts as its Queen, Elizabeth the Second. Her Majesty appoints the Governor who acts as head of state, generally for a five-year term. The relationship existing between the Queen and the British Parliament is broadly the same as that existing between the Governor and the Tasmanian Parliament. For details relating to the Governor's powers and functions, see the 1976 and earlier editions of the *Year Book*.

## Succession of Governors, Acting Governors, Administrators, etc. from 1924

Name	Designation	Period
Sir James O'Grady, KCMG .....	Governor	23.12.24-23.12.30
Sir Herbert Nicholls, KCMG .....	Lieutenant-Governor	23.12.30- 4. 8.33
Sir Ernest Clark, KCMG, KCB, CBE .....	Governor	4. 8.33- 4. 8.45
Sir John Morris, KT .....	Administrator	4. 8.45-24.12.45
Admiral Sir Hugh Binney, KCB, KCMG, DSO .....	Governor	24.12.45- 8. 5.51
Sir John Morris, KCMG .....	Administrator	8. 5.51-22. 8.51
Rt Hon. Sir Ronald Cross, Bart, KCMG, KCVO .....	Governor	22. 8.51- 4. 6.58
Hon. Sir Stanley Burbury, KBE .....	Administrator	4. 6.58-21.10.59
Rt Hon. the Lord Rowallan, KT, KBE, MC .....	Governor	21.10.59-25. 3.63
Hon. Sir Stanley Burbury, KBE .....	Administrator	25. 3.63-24. 9.63
Lt-General Sir Charles Gairdner, KCMG, KCVO, KBE, CB .....	Governor	24. 9.63-11. 7.68
Hon. Sir Stanley Burbury, KBE .....	Administrator	11. 7.68- 2.12.68
Lt-General Sir Edric Bastyan, KCMG, KCVO, KBE, CB .....	Governor	2.12.68-30.11.73
Hon. Mr Justice Green .....	Administrator	30.11.73- 5.12.73
Hon. Sir Stanley Burbury, KCVO, KBE .....	Governor	5.12.73-30. 9.82
Hon. Sir Guy Green, KBE .....	Lieutenant-Governor	1. 4.82-30. 9.82
Sir James Plimsoll, AC, CBE .....	Governor	1.10.82-



Until the succession of Sir Stanley Burbury, KBE on 5 December 1973, Tasmanian governors had come from the United Kingdom since the first settlement, although in some other states and the Commonwealth, Australians had been appointed to vice-regal offices. Sir Stanley was sworn in on 5 December 1973, succeeding Lt-General Sir Edric Bastyan, a former Governor of South Australia.

The preceding table shows the succession of governors from 1924. Administrators and lieutenant-governors (who act in place of the Governor in the event of his death, incapacity, removal or absence from the State) are only included where necessary, to maintain a continuous time series (i.e. short periods of relief during a governorship are excluded). A complete list from 1803 is included in the 1976 *Year Book*.

### The Cabinet and Executive Government

#### *General*

In Tasmania, as in the other States and the Commonwealth Government, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as 'Cabinet', or 'responsible' government. Its essence is that the head of the state (in Tasmania, the Governor representing Her Majesty the Queen) should perform governmental acts on the advice of his ministers; that he should choose his principal ministers of state from members of parliament belonging to the party, or coalition of parties, commanding a majority in the popular house; that the ministry so chosen should be collectively responsible to that house for the government of the country; and that the ministry should resign if it ceases to command a majority there.

The Cabinet system operates chiefly by means of constitutional conventions, customs or understandings, and through institutions that do not form part of the legal structure of the government at all. In law, the executive power of the State is exercised by the Governor who is advised by the Executive Council which he himself has appointed and which meets for certain formal purposes. The whole policy of a ministry is, in practice, determined by the ministers of the Crown, meeting without the Governor under the chairmanship of the Premier, and this body is known as the Cabinet.

#### *The Appointment of Ministers*

Legally, ministers hold office during the pleasure of the Governor. In practice, however, the discretion of the head of state in the choice of ministers is limited by the conventions on which the Cabinet system rests. When a ministry resigns, the Governor's custom is to send for the leader of the party which commands a majority in the lower house, and to commission him as Premier, to 'form a ministry'—that is, to nominate other persons to be appointed as ministers of the Crown and to serve as his colleagues in the Cabinet.

At 6 December 1983 the ministry, led by the Hon. R. T. Gray, was:

**Ministry at 6 December 1983**

<i>Name</i>	<i>House</i>	<i>Ministerial responsibilities (a)</i>
The Hon. R. T. Gray .....	Assembly	Premier; Treasurer; Energy; Racing and Gaming.
The Hon. E. M. Bingham .....	Assembly	Deputy Premier; Attorney-General; Education; Industrial Relations.
The Hon. G. A. Pearsall .....	Assembly	Tourism; National Parks and Recreational Lands; Environment; Licensing; Housing.
The Hon. N. M. Robson .....	Assembly	Industry and Small Business; Inland Fisheries.
The Hon. T. J. Cleary .....	Assembly	Health; Community Welfare and the Elderly; Ethnic Affairs.
The Hon. I. M. Braid .....	Assembly	Construction; Main Roads; Local Government; Lands.
The Hon. R. J. Beswick .....	Assembly	Primary Industry; Forests; Sea Fisheries; Water Resources.
The Hon. F. R. Groom .....	Assembly	Mines; Transport; Administrative Services; Police and Emergency Services.

(a) See section 'Departments' later in the chapter for a more detailed statement of responsibility.

The *Constitution Act* 1854 defined the Parliament of Tasmania as 'the Governor and the Legislative Council and House of Assembly together'. Although no legal requirements enforce it, the selection of all ministers of the Crown from Parliament stems from the British tradition and sharply contrasts with the American system which requires its ministers not to be members of Congress.

### Premiers

The following table lists Premiers of Tasmania from 1928 (a complete list from 1856 is included in the 1976 *Year Book*):

Premiers from 1928			
Name of Premier	Term of office		Duration of office (months)
	From	To	
J. C. McPhee .....	15.6.28	15.3.34	69
Sir Walter Lee .....	15.3.34	22.6.34	3
A. G. Ogilvie (a) .....	22.6.34	10.6.39	60
E. Dwyer Gray .....	11.6.39	18.12.39	6
R. Cosgrove .....	18.12.39	18.12.47	96
E. Brooker .....	18.12.47	25.2.48	2
R. Cosgrove .....	25.2.48	26.8.58	126
E. E. Reece .....	26.8.58	26.5.69	129
W. A. Bethune .....	26.5.69	3.5.72	35
E. E. Reece .....	3.5.72	31.3.75	35
W. A. Neilson .....	31.3.75	1.12.77	32
D. A. Lowe .....	1.12.77	11.11.81	47
H. N. Holgate .....	11.11.81	26.5.82	7
R. T. Gray .....	26.5.82		

(a) Tasmania had an unbroken succession of Labor premiers, starting with the Ogilvie Ministry (1934) until the electoral defeat of the Reece government on 26 May 1969.

### The House of Assembly

The Tasmanian Lower House comprises 35 members elected from five seven-member electorates. The *Constitution Act* 1972 provided that the Assembly chosen at the elections held on 22 April 1972 would continue in office for a maximum term of five years and that thereafter the term for the House of Assembly would be four years.

### Elections for the House of Assembly

Elections for the House of Assembly are conducted under a system which can be classified as proportional representation by the single transferable vote (commonly known as the Hare-Clark system).

The essential features of the system are as follows:

- (i) For an elector to cast a valid vote, he must express at least seven preferences.
- (ii) Party groups are identified on ballot papers, with ungrouped candidates listed together on the right of the ballot paper. Candidates' positions within groups are determined by a system of rotation so that in designated 'preferred' positions, all candidates appear on the same number of ballot papers.
- (iii) To secure election, candidates must secure a quota in accordance with the Droop formula (i.e. the total first-preference votes in the constituency divided by eight, plus one vote; see below).

- (iv) Should a candidate secure an exact quota on first preferences, he is declared elected and his voting papers are set aside as finally dealt with.
- (v) Any candidates who secure a surplus of first preferences above the quota are declared elected.
- (vi) For each elected candidate, commencing with the one with the largest surplus, a transfer value is calculated by dividing the successful candidate's number of surplus first preference votes by his total number of first preferences. All his voting papers are then re-examined and the number of next available choice votes for each of the non-elected candidates determined and multiplied by the transfer value. The resulting numbers are added to the non-elected candidates' respective numbers of first preference votes.
- (vii) Where a transfer raises the number of votes obtained by a candidate up to a quota, he is declared elected. That particular transfer is then completed but no further votes of any other candidate are transferred to him.
- (viii) In the case of a candidate who reaches a quota through transferred votes, his surplus votes above the quota are divided by the number of voting papers transferred to him in the last transfer. The resulting fraction is the transfer value which is applied to voting papers he obtained in the last transfer which are then transferred to remaining unelected candidates according to the next available choices.
- (ix) When transfers have been completed in respect of all candidates who obtained a surplus above a quota as a result of the above procedures, the candidate who is lowest on the poll is excluded and his voting papers are distributed to the remaining non-elected candidates according to the next available choices. His own first preference votes are transferred first, retaining a value of one each. Voting papers that have been transferred to him are dealt with in the order of the transfers already carried out and retain the respective transfer values at which he obtained them.
- (x) Steps (vi) and (ix) are continued, as necessary, until either seven candidates are elected or all candidates except seven have been excluded. In the latter case, unelected candidates not already elected are declared elected.

The scrutiny of preferences and distribution of choices cannot commence until all votes are to hand—this does not occur until the Friday following polling day. As might be expected the counting of votes, calculation of transfer values and the transferring of votes are time-consuming operations and a week may elapse before the declaration of a poll.

NOTE: The 'Droop formula' states that the minimum number of votes necessary to secure election is the total number of votes divided by one more than the number of members to be elected, plus one vote.

*Advantages of the Hare-Clark System:* The major advantage claimed for the system is that the composition of the House of Assembly tends to faithfully reflect the wishes of the electors viewed on a state basis, and that a party with a minority of first preferences is most unlikely to obtain a majority of seats, as sometimes occurs in systems with single-member constituencies. By way of example, South Australia, using single-member electorates has sometimes been governed by parties receiving a minority of votes but a majority of seats; other Australian states have had similar experiences. A further significant advantage is that all electors have a wide choice of candidates *within* the parties, whereas in single-member electorates there is usually no choice of candidates for an elector determined to vote for a particular party. In the latter case, an elector may be forced to vote for a candidate whom he considers to be less than competent.

## 1982 Election

Following a vote of no-confidence in the Holgate Labor Government the Assembly was dissolved. At the subsequent election held on 15 May 1982, the Liberal Party, led by Mr Robin Gray gained a three seat majority and, for the first time formed a government in its own right. Three ministers lost their seats and six new members were elected. First preference votes cast statewide, by party, were as follows: Liberal Party 121 346 (48.5%); ALP 92 184 (36.81%); Independents 23 090 (9.23%); Australian Democrats 13 476 (5.3%). The composition of the new Assembly was: Liberal 19 seats; ALP 14 seats; Australian Democrats one seat; Independent one seat. On 23 December, the Australian Democrat, Dr N. K. Sanders resigned his seat which was filled on a recount of his quota by Dr Robert Brown (Independent).

The next table shows the results of House of Assembly elections by parties from 1959:

Representation of Parties for the Whole State: House of Assembly						
Election Year	Labor		Liberal		Other (a)	
	Proportionate share (b)	Seats won	Proportionate share (b)	Seats won	Proportionate share (b)	Seats won
1959 .....	15.58	17	14.37	16	5.05	2
1964 .....	17.97	19	13.47	16	3.56	—
1969 .....	15.91	17	14.68	17	4.41	1
1972 .....	19.22	21	13.43	14	2.35	—
1976 .....	18.37	18	15.57	17	1.06	—
1979 .....	19.01	20	14.46	15	1.53	—
1982 .....	12.90	14	16.98	19	5.12	2

(a) Independents and minority parties.

(b) State treated as single electorate and proportionate share of seats calculated on basis of first preference votes cast for parties.

## Votes Recorded at Assembly Elections

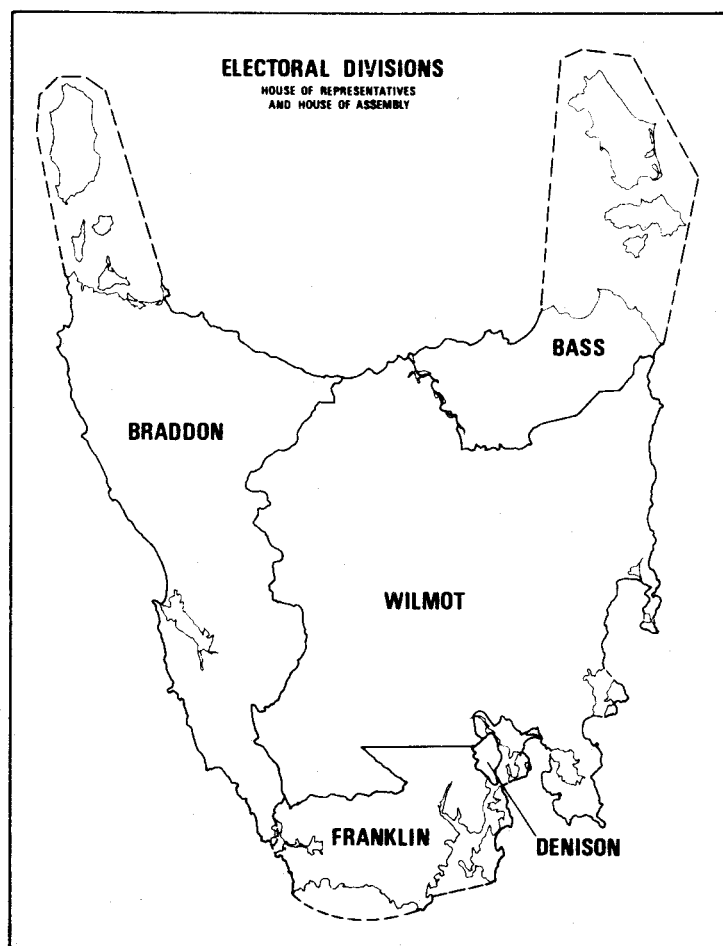
Voting in general elections since 1959 is shown in the following table:

House of Assembly Elections, Tasmania					
Year of election	Electors on roll	Votes recorded		Informal votes	
		Number	As percentage of enrolled electors	Number	Percentage of total votes recorded
1959 .....	180 344	170 559	94.6	9 816	5.8
1964 .....	193 418	184 571	95.5	7 980	4.3
1969 .....	210 268	198 571	94.4	9 248	4.7
1972 .....	216 846	205 803	94.9	7 533	3.7
1976 .....	258 550	244 424	94.5	9 294	3.8
1979 .....	265 428	248 866	93.8	9 582	3.9
1982 .....	283 549	265 101	93.5	15 005	5.7

The percentage of informal votes in the previous table is not particularly high, even though the voting papers for six or seven-member electorates are necessarily more complicated than those for single-member electorates. At elections prior to 1976 voters were required to mark at least three candidates in order of preference. However, an amendment to the *Electoral Act* made prior to that election required voters to mark at least seven candidates in order of preference. This change has had no obvious effect on the number of informal votes cast.

*Constituencies of House of Assembly*

The five constituencies for the House of Assembly are identified with the five electoral divisions electing members to the Federal House of Representatives. The next map and table show composition and extent of each electorate. The map shows new electoral boundaries that were adopted in November 1977 following an electoral redistribution for the House of Representatives.



House of Assembly: Enrolments by Electorate at 30 June

<i>Electorate</i>	1978	1979	1980	1981	1982	1983
Bass .....	53 607	53 441	55 395	56 096	57 183	57 568
Braddon .....	50 858	51 212	53 321	53 895	55 709	54 945
Denison .....	54 769	54 355	55 156	55 410	57 137	56 090
Franklin .....	52 041	52 691	55 010	56 791	58 587	58 409
Wilmot .....	52 000	52 606	54 201	55 298	57 254	57 860
Total .....	263 275	264 305	273 083	277 490	285 870	284 872

*Members of the House of Assembly*

The following table shows members of the House of Assembly and their party allegiance as at 22 December 1983:

Members of the House of Assembly as at 22 December 1983

<i>Electoral Division</i>	<i>Member's name</i>	<i>Party affiliation</i>
Bass .....	Barnard, Michael Thomas Claude	ALP
	Beswick, The Hon. Richard John	Liberal
	Bushby, The Hon. Maxwell Holmes (a)	Liberal
	Holgate, The Hon. Harold Norman	ALP
	James, Gillian Hilma	ALP
	Lyons, Brendon Aloysius	Liberal
	Robson, The Hon. Neil Maxwell	Liberal
Braddon .....	Bonney, Raymond Claude	Liberal
	Cornish, Ronald	Liberal
	Coughlan, John Anthony	ALP
	Davies, Ronald Glen	ALP
	Field, Michael Walter	ALP
	Groom, The Hon. Francis Roger	Liberal
	Smith, Vincent John	Liberal
Denison .....	Amos, Julian John	ALP
	Bingham, The Hon. Eardley Max (b)	Liberal
	Brown, Robert James	Ind.
	Davis, Geoffrey Bertrand	Liberal
	Devine, John Herbert	ALP
	Haros, Gabriel George	Liberal
	Walker, Peter Benson	Liberal
Franklin .....	Aird, Michael Anthony	ALP
	Beattie, John Maxwell (c)	Liberal
	Cleary, The Hon. Thomas John	Liberal
	Lowe, The Hon. Douglas Ackley	Ind.
	McKinnon, William Gillies	ALP
	Pearsall, The Hon. Geoffrey Allan	Liberal
	Wriedt, The Hon. Kenneth Shaw (d)	ALP
Wilmot .....	Baldock, Darrel John	ALP
	Braid, The Hon. Ian Maxwell	Liberal
	Gray, The Hon. Robin Trevor (e)	Liberal
	Lohrey, Andrew Barnard	ALP
	Page, Graeme Reginald	Liberal
	Polley, Michael Robert	ALP
	Salter, Stephen Gordon	Liberal

(a) Speaker.

(b) Deputy Premier.

(c) Chairman of Committees.

(d) Leader of the Opposition.

(e) Premier.

*By-Elections*

In the case of a vacancy occurring in the House of Assembly, there is provision for the Chief Electoral Officer to publicly invite nominations from candidates who were unsuccessful at the last general election in the constituency which elected the vacating member. If one nomination only is received the consenting candidate is declared elected and the Governor notified to this effect.

If more than one such nomination is received, the Chief Electoral Officer is required to examine the voting papers counted for the vacating member at the last general election. In the simple case—where the vacating member obtained a surplus of first preference votes above the quota—this can be confined to voting papers expressing that first preference.



In the more difficult case—where the vacating member did not obtain a quota on first choices—it is necessary to take into account not only original first-choice papers but also all voting papers representing votes transferred to the vacating member.

The vacating member's voting papers, as defined above, are examined and all his votes are transferred to the consenting candidates according to the preferences expressed thereon. Next available choices derived from first-choice votes of the vacating member have a transfer value of one, but from votes he obtained by transfer, only the value at which he obtained them. For the purpose of the count, first-choice votes received by the consenting candidates at the general election are not relevant—the selection is based on preferences as revealed by the voting papers of the vacating member.

When the number of votes in favour of each consenting candidate has been ascertained, the final selection is by the method of the absolute majority through the alternative vote. If no nominations are received from candidates unsuccessful at the last general election, then an election is held to fill the vacancy.

#### *Dissolution of House of Assembly*

The Governor may dissolve the House of Assembly whenever he considers it desirable but he has no power to dissolve the Legislative Council. In effect then, the Legislative Council is a perpetual body except that approximately one-sixth of its seats fall vacant annually. As there is no provision for a double dissolution the Legislative Council, by rejection of a Supply Bill, can force the House of Assembly to seek a dissolution without itself needing to face the electorate. This last occurred in 1948. In practice, the Governor considers dissolving the House of Assembly only when requested to do so by his ministers.

#### *Sessions of Parliament*

Parliament is required to sit every year and, having risen, must sit again before 12 months have elapsed. When the House of Assembly is dissolved and a general election held, the Governor is required to call Parliament together within 90 days of the dissolution, subject to a discretionary extension of a further 30 days.

### **The Legislative Council**

#### *Annual Fractional Elections*

For the purpose of electing members of the Legislative Council, the State is divided into 19 single-member constituencies. Each member, when elected, holds office for six years and Council elections are held every year to elect three members; every sixth year four members are elected. There are no general elections for the Legislative Council.

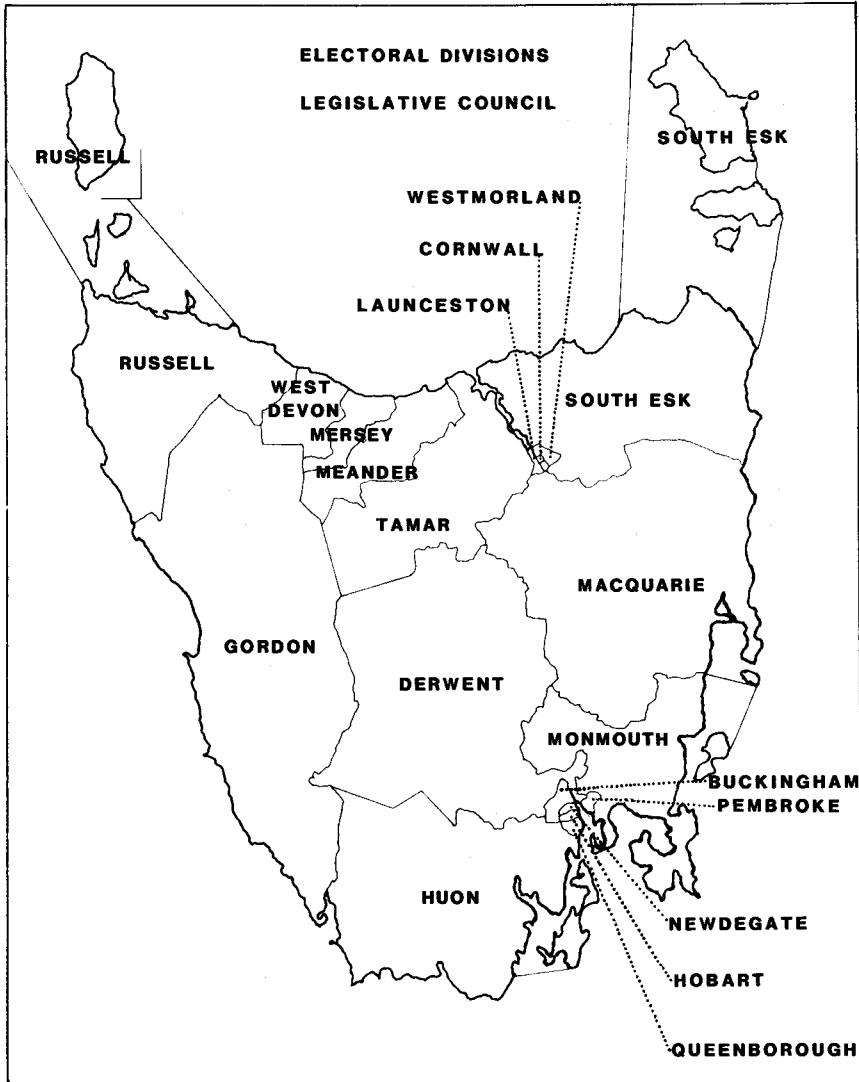
#### *Preferential Voting*

An amendment to the *Electoral Act* 1907 in 1980 changed the method of determining the positions of candidates' names on ballot papers. Previously the order of candidates' names was determined by ballot. (Prior to a 1973 amendment to the *Electoral Act*, candidates' names appeared in alphabetical order.) The 1980 amendment, however, introduced a system of 'rotating ballot papers' for both Houses. This provides that there shall be different batches of ballot papers on which candidates' names are placed in different positions. Although the system does not provide for all possible permutations, it ensures that all candidates are given an equal opportunity to share in the assumed benefit attached to being placed in designated 'preferred' positions on a ballot paper. If there are two candidates, the voter need only vote for one. If there are three or more candidates, the voter must indicate at least three preferences to record a valid vote. Unlike ballot papers for House of Assembly elections, candidates' names on Legislative Council papers are not grouped to show party allegiance, nor is there any indication whether or not a candidate belongs to a political party.

If any candidate secures first-preference votes exceeding half the total first preferences, he is declared elected. If no candidate satisfies this condition, then the candidate with the least votes is excluded and the second preferences shown on his voting papers are transferred to other candidates, the transfer value of each such second preference being

equal to one. If no candidate then has the required majority, the process of exclusion is repeated until such time as one candidate secures the majority.

The method of counting is identical with that used in elections for the federal House of Representatives and is termed preferential. The full description is election by absolute majority through use of the alternative vote.



#### *By-Elections*

In the case of a vacancy occurring in the Legislative Council, a writ is issued directing that an election be held to fill the vacancy. There is no provision for a re-count of voting papers of the vacating member as for the House of Assembly.

#### *Status of Legislative Council*

The Legislative Council has the tradition of being a non-party house; in 1983 the composition of the house was 18 Independents and one Labor Party representative. The

leader for the Government in the Legislative Council cannot rely upon a vote taken on party lines to ensure the passage of any government bill. It is the ability to command a majority in the House of Assembly which gives a party the right to form the government of the day and which ensures the passage of government legislation through the lower house; no such certainty exists in the passage of bills through the upper house.

Following conflict between the two Houses of Parliament over a money bill during 1924 and 1925, the *Constitutional Amendment Act* 1926 was passed. This Act defined the relations between the two Houses, especially with regard to the passing of money bills. The following current principles are found in the Act:

- (i) the Legislative Council retains the right to reject any bill, including a money bill;
- (ii) the Council is specifically prevented from amending bills to raise revenue for the ordinary annual services of the Government and bills imposing land and income tax;
- (iii) it can suggest to the House of Assembly that amendments be made but the adoption or rejection of such amendments is at the discretion of the Assembly; and
- (iv) the operation of such bills is restricted to a period of one year.

Apart from the above specific exceptions, the Council retains the right to amend money bills, e.g. those dealing with loan funds or probate. The House of Assembly is given the sole right to initiate bills for the raising of revenue and the imposition of taxes. Finally, the powers of the two houses are declared equal in all matters except for these specific exceptions.

#### *Boundaries, Legislative Council Divisions*

In 1980 the Legislative Council established a Select Committee to recommend changes to its electoral boundaries. As a result of the findings of this Committee an amendment to the *Constitution Act* was passed and received Royal Assent on 3 December, 1980. Boundary changes took effect immediately after the Legislative Council elections held on 23 May 1981. The following table shows the number of electors in each division as at 30 June for recent years:

Legislative Council: Enrolments by Electorate at 30 June						
<i>Electoral Divisions (a)</i>	1978	1979	1980	1981	1982	1983
Buckingham (H) .....	15 544	16 076	16 609	16 245	16 245	15 996
Cornwall (L) .....	13 948	13 235	13 236	12 731	12 703	12 359
Derwent (R) .....	6 623	7 438	7 482	13 259	13 304	13 246
Gordon (S) .....	6 607	6 571	6 479	6 469	6 753	6 284
Hobart (H) .....	14 061	13 178	13 261	15 692	17 040	16 152
Huon (R) .....	13 855	13 817	14 300	14 562	15 409	15 464
Launceston (L) .....	14 781	14 092	14 337	14 570	15 778	15 266
Macquarie (R) .....	7 684	7 562	8 246	11 136	11 248	11 103
Meander (R) .....	8 495	8 445	8 709	11 460	11 403	11 229
Mersey (DU) .....	19 346	19 006	19 442	17 686	17 972	16 882
Monmouth (R) .....	11 175	12 001	12 081	13 214	13 165	13 364
Newdegate (H) .....	17 849	17 427	17 051	14 701	13 974	13 940
Pembroke (H) .....	25 617	24 970	24 853	18 466	19 548	19 633
Queenborough (H) .....	13 623	13 505	13 581	14 164	13 665	13 845
Russell (R) .....	12 910	12 796	12 663	13 801	13 445	13 216
South Esk (R) .....	10 855	10 787	12 256	12 253	12 526	12 569
Tamar (R) .....	9 821	11 115	11 101	10 995	11 017	12 228
West Devon (BP) .....	15 134	15 130	15 036	14 745	15 233	15 802
Westmorland (L) .....	11 996	13 530	13 499	13 639	13 732	13 612
Total .....	249 924	250 681	254 222	259 788	264 160	262 190

(a) (H) = Hobart and suburban; (L) = Launceston and suburban; (BP) = Burnie and Penguin municipalities; (DU) = Parts of Devonport and Ulverstone municipalities; (R) = rural; (S) = special.





**LAUNCESTON CITY COUNCIL ALDERMEN 1984**

*From left: Ald. D.O. Chellis, Ald. N.H. Pitt, Ald. R.S. Bessant, Ald. R.B. Walker, Mayor's Chaplain: Rev. M.J.K. Ramage, The Mayor: Ald. The Hon. D.G. Wing, MLC, City Manager/Town Clerk: Mr. J.D. Yaxley, Ald. M.G. Cleaver, OBE, Ald. A. Tsinoglou, Ald. R.L. McKendrick, Ald. G.W. Beams, centre: Administration Manager: Mr. D.J. Wilson*



**DEVONPORT CITY COUNCIL ALDERMEN 1983**

*From left back row: Ald. B.C. Dowse, Ald. G.B. Squibb, Ald. M.G. O'Dea, centre row: Ald. R.G. Bott, Ald. R.T. Hope, MLC, Ald. R.M. Churcher, Ald. J.B. Palmer, Ald. D.J. Grant front row: Ald. J.A. Benson, Ald. I.H. Day (Deputy Mayor), The Mayor: Ald. K.C. Berwick, Ald. W.P. Wilson*





**HOBART CITY COUNCIL ALDERMEN 1984**

*From left: Back row: Ald. D. Plaister, Ald. D. Peck, Ald. A. Hurburgh, Ald. D. Alty, Ald. B. Fisher  
Front row: Ald. D. Kennedy, Deputy Lord Mayor: Ald. B. O'Connor, Lord Mayor: Ald. B. Broadway, Ald. G. Yeoland,  
Ald. D. Thomson. Insets: left; Ald. T. Haigh, right; Ald. R. Excell.*



**GLENORCHY CITY COUNCIL ALDERMEN 1984**

*From left: Back row: Ald. T. Dempsey, Ald. B. Horne, Ald. A. Ransley, Ald. J. Nicholson, Ald. J. Percy,  
Ald. A. Goodluck  
Front row: Ald. D. Fall, Ald. B. Wills, City Manager: S. A. Wardlaw, The Mayor: Ald. D. Shields,  
Deputy Mayor: Ald. L. Milburn, Ald. L. Carland, Ald. G. Strickland.*



*Legislative Council Members*

The next table shows members of the Legislative Council (following the elections held in the Divisions of West Devon, Tamar, Pembroke and Queenborough on 28 May 1983), the electoral division which they represent and the year in which each will retire from the Council:

Members of the Legislative Council, December 1983

<i>Electoral Division</i>	<i>Member's name</i>	<i>Year of retirement</i>
Buckingham .....	Lowrie, The Hon. Kenneth Francis (a)	1986
Cornwall .....	Le Fevre, The Hon. Vernon MacKenzie	1984
Derwent .....	Batt, The Hon. Charles Leo (b)	1985
Gordon .....	Broadby, The Hon. Albert James	1988
Hobart .....	Petrusma, The Hon. Hendrik	1988
Huon .....	Hodgman, The Hon. Peter (c)	1984
Launceston .....	Wing, The Hon. Donald George	1988
Macquarie .....	Shaw, The Hon. George Arthur	1986
Meander .....	Hope, The Hon. Reginald Thomas	1985
Mersey .....	Braid, The Hon. Henry William (d)	1984
Monmouth .....	Wilson, The Hon. Stephen John	1987
Newdegate .....	Miller, The Hon. Brian Kirkwall	1987
Pembroke .....	McKay, The Hon. Peter Charles	1989
Queenborough .....	Stopp, The Hon. Eric John Chancellor	1989
Russell .....	Fletcher, The Hon. Anthony William	1987
South Esk .....	Archer, The Hon. Richard Clive	1986
Tamar .....	Coates, The Hon. Jeffrey Allan	1989
West Devon .....	Hiscutt, The Hon. Hugh James	1989
Westmorland .....	Gregory, The Hon. Oliver Harold	1985

(a) Leader for the Government in the Legislative Council.

(b) Endorsed by the Australian Labor Party; other members are independents.

(c) Deputy Leader.

(d) President.

**Qualifications of Electors and Members***Qualifications of Electors, State Elections*

An elector for both the House of Assembly and the Legislative Council is any person, aged at least 18 years, male or female, who has lived in the State for six months continuously, who is natural-born or a naturalised subject of the Queen and whose name is on the electoral roll for an electoral division. (Legislation reducing the voting age to 18 years passed both Houses of Parliament in mid-1973.) Voting has been compulsory since the passing of the *Electoral Act* 1928. Special qualifications which had previously been required for electors of the Legislative Council were abolished on 1 July 1969 following amendments to the *Constitution Act* 1934 and the *Electoral Act* 1907.

*Qualifications of Members, State Parliament*

*House of Assembly:* To be eligible for election as a member of the House of Assembly, a candidate must comply with the following conditions: he must either be an elector or be qualified to be an elector for the House of Assembly and resident in Tasmania for five years at any one time or resident for two years immediately preceding the election.

*Legislative Council:* A candidate for the Legislative Council must be an elector or have the qualifications of an elector for the Council; in addition he must meet the residential restrictions imposed on candidates for the House of Assembly.

Persons of unsound mind or in prison under any conviction are barred from voting at elections for either house or from being elected to either house. No person shall be a member of both houses at the one time.



### Salaries of Members of Parliament

Under provisions of the *Parliamentary Salaries and Allowances Act 1973*, a basic rate of pay to members is calculated annually. This basic rate is set as the 'interstate average' of the rates payable to ordinary 'back bench' members of the Legislative Assemblies of New South Wales, Victoria, Queensland and Western Australia and the House of Assembly of South Australia. Calculation of the interstate average is the responsibility of the 'salaries committee' comprising the Government Statistician, Clerk of the Legislative Council and Clerk of the House of Assembly. The committee is required to meet as soon as practicable after 15 June each year and make the necessary calculation. A report on the method adopted to make the calculation and the interstate average is then forwarded to the Auditor-General who may accept the calculation or himself make a calculation replacing that of the salaries committee. Having either accepted the salaries committee's calculation or substituted one of his own, the Auditor-General is required to publish in the *Government Gazette* the appropriate interstate average which then becomes the basic salary for payment of parliamentary salaries and allowances.

In July 1982 an amendment to the *Parliamentary Salaries and Allowances Act 1973* effectively 'froze' parliamentarians' salaries and allowances at that figure. On 29 June 1983 a further amendment to the Act had the effect of removing New South Wales and Victoria from the states upon which the calculation was based, and also continued the 'salary freeze' until 1 January 1984. Thus the parliamentary salaries and allowances have remained unchanged for two and a half years.

On 1 January 1984 the salaries, calculated as an average of those payable to ordinary back-bench Members of the Legislative Assemblies of Western Australia, South Australia and Queensland as at 15 June 1983, will be payable. The amount so calculated is \$34 630 per annum.

#### Special Rates Payable in Addition to the Basic Salary (a) (Per Cent)

Particulars	Additional salary payable as proportion of basic salary (b)	Particulars	Additional salary payable as proportion of basic salary (b)
Cabinet—		House of Assembly—	
Premier .....	125	Speaker .....	33½
Deputy Premier .....	85	Chairman of Committees ....	20
Ministerial office .....	70	Leader of the Opposition ....	70
Secretary to Cabinet .....	30	Deputy Leader of the Opposition .....	17
Legislative Council—		Government Whip .....	6
President .....	33½	Opposition Whip .....	6
Leader of the Government ..	70		
Chairman of Committees ....	20		
Deputy Leader of the Government .....	11		

(a) The basic salary was set at \$34 630 in July 1983 and is payable from 1 January 1984.

(b) Salary in excess of basic rate (e.g. the Premier receives basic rate + 1.25 × basic rate), i.e. \$77 917 from January 1984.

*Allowances Payable to Members:* Electoral allowances, and entertainment allowances are calculated as a proportion of the base rate. Travel allowances are related to rates payable to permanent heads of State Government Departments. The next table shows the electoral allowances payable as a proportion of the basic salary:

**Electoral Allowances Payable as a Proportion of the Basic Salary (a)  
(Per Cent)**

<i>Electoral division</i>	<i>Proportion of basic salary payable</i>	<i>Electoral division</i>	<i>Proportion of basic salary payable</i>
<b>Legislative Council—</b>		<b>Legislative Council— continued</b>	
Buckingham .....	13	Queenborough .....	11
Cornwall .....	12	Russell .....	26
Derwent .....	18½	South Esk .....	26
Gordon .....	26	Tamar .....	18½
Hobart .....	11	West Devon .....	17
Huon .....	18½	Westmorland .....	14
Launceston .....	12	<b>House of Assembly—</b>	
Macquarie .....	20	Bass .....	26
Meander .....	22	Braddon .....	30
Mersey .....	17	Denison .....	15
Monmouth .....	24	Franklin .....	21
Newdegate .....	11	Wilmot .....	35
Pembroke .....	13		

(a) The basic salary payable from 1 January 1984 was set at \$34 630 in July 1983.

### Departments

The system of responsible government in Tasmania requires that the executive power of the State shall be exercised by the Cabinet; in exercising this power, the ministers of the Cabinet are held responsible for the actions and administration of government departments and other governmental authorities which have been created for three basic purposes: (i) to put into practice the laws made by parliament; (ii) to give effect to the decisions of the ministry; and (iii) to advise the ministry on matters of policy.

The next section lists the departments and authorities under the various ministers but the allocation of responsibility is subject to change and Cabinet has the power to vary it at any time. A table in the earlier section 'The Cabinet and Executive Government' lists the names of ministers holding the various portfolios.

### Cabinet Portfolios and Responsibilities at 22 December 1983

<i>Premier, Treasurer, Minister for Energy, Minister for Racing and Gaming</i>	
Premier's Department	Treasury Department
Public Service Board	Hydro-Electric Commission
Audit Department	Racing and Gaming Commission
The Ombudsman	Racing Trust
Anzac Day Trust	Totalizator Agency Board
<i>Deputy Premier, Attorney-General, Minister for Education, Minister for Industrial Relations</i>	
Law Department—	Supreme Court and Sheriff's Department
Attorney-General's Division	Solicitor-General
Prisons Division	Parts V and VI of the Public Service Act
Registrar-General's Division	State Library
Corporate Affairs Division	Council of Advanced Education
Education Department	University of Tasmania
Department of Labour and Industry	Museum and Art Gallery
Public Trust Office	Tasmanian Arts Advisory Board
<i>Minister for Tourism, Minister for National Parks and Recreational Lands, Minister for the Environment, Minister for Licensing, Minister for Housing</i>	
Department of Tourism	Environment
Licensing Board	Housing Department
National Parks and Wildlife Service	

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**Cabinet Portfolios and Responsibilities at 22 December 1983—continued***Minister for Industry and Small Business, Minister for Inland Fisheries*


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Tasmanian Development Authority	Premiums Board
Inland Fisheries Commission	Electoral Department
Tasmanian Government Insurance Office	Consumer Affairs Council
Motor Accidents Insurance Board	

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*Minister for Health, Minister for Community Welfare and the Elderly, Minister for Ethnic Affairs*


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Alcohol and Drug Dependency Board	Handicapped Persons Services Secretariat
Department of Health Services	Department for Community Welfare
Mental Health Services Commission	Multicultural Affairs Office

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*Minister for Construction, Minister for Main Roads, Minister for Local Government, Minister for Lands*


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Department of Construction	Town and Country Planning Commission
Department of Main Roads	Department of Lands
Division of Municipal Planning	

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*Minister for Primary Industry, Minister for Forests, Minister for Sea Fisheries, Minister for Water Resources*


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Department of Agriculture	North-West Regional Water Authority
Forestry Commission	Dairy Industry Authority
Tasmanian Fisheries Development Authority	Egg Marketing Board
Rivers and Water Supply Commission	Tasmanian Grain Elevators Board
Metropolitan Water Board	Tasmanian Herd Improvement Organisation

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*Minister for Mines, Minister for Transport, Minister for Administrative Services, Minister for Police and Emergency Services*


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Mines Department	Royal Botanical Gardens
Transport Tasmania	Police Department
Metropolitan Transport Trust	State Emergency Services
Government Printer	Tasmanian Fire Services
Department of Supply and Tender	

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**State Government Departments and Officials (a)**

Agricultural Bank of Tasmania, Lands Building, 134 Macquarie Street, Hobart. Tel. 30 8022  
*Manager:* B. R. Connor

Agricultural Department, Marine Board Building, 1 Franklin Wharf, Hobart. Tel. 30 8022  
*Director:* P. J. Fountain

Apprenticeship Commission, 24 Murray Street, Hobart. Tel. 30 8011  
*President:* D. Morrow

Audit Department, TGIO Building, 144 Macquarie Street, Hobart. Tel. 30 8011  
*Auditor-General:* J. M. Nichols

Community Welfare, Department for, 12 Murray Street, Hobart. Tel. 30 8011  
*Director:* D. W. Daniels

Construction, Department of, 10 Murray Street, Hobart. Tel. 30 8011  
*Director:* Vacant

Consumer Affairs Council, 25 Davey Street, Hobart. Tel. 30 8011  
*Secretary:* J. Cliffe-Hickling

Council of Advanced Education, Newnham Drive, Newnham. Tel. 003 26 0201  
*Chairman of Council:* E. A. Rouse

Dairy Industry Authority, GPO Box 976, Launceston. Tel. 003 31 9666  
*Chairman:* B. J. Smithies

Education Department, 116 Bathurst Street, Hobart. Tel. 30 8022  
*Director-General:* K. Axton

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State Government Departments and Officials (a)—continued

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- Electoral Department, TGIO Building, 144 Macquarie Street, Hobart. *Tel.* 30 8011  
*Chief Electoral Officer:* K. F. Febey
- Environment, Department of the, Kirksway House, Kirksway Place, Battery Point. *Tel.* 30 8033  
*Director:* J. F. Pottinger
- Fisheries Development Authority, 23 Old Wharf, Hobart. *Tel.* 30 8022  
*Chairman:* R. T. Mackay
- Forestry Commission, 199 Macquarie Street, Hobart. *Tel.* 30 8033  
*Chief Commissioner:* J. R. Quick
- Government Printing Office, 2 Salamanca Place, Hobart. *Tel.* 30 8033  
*Government Printer:* A. B. Caudell
- Health Services, Department of, Cnr Davey and Murray Streets, Hobart. *Tel.* 30 8022  
*Director-General:* G. Mackay-Smith
- Housing, Department of, Lampton Avenue, Glenorchy. *Tel.* 30 8011  
*Director:* C. A. Sproule
- Hydro-Electric Commission, 4-16 Elizabeth Street, Hobart. *Tel.* 30 1101  
*Commissioner:* J. R. Ashton
- Industrial Development, Department of, Mardem House, 30 Patrick Street, Hobart. *Tel.* 30 8011  
*Director:* N. Ashdown
- Inland Fisheries Commission, 127 Davey Street, Hobart. *Tel.* 23 7161  
*Commissioner:* D. D. Lynch
- Labour and Industry, Department of, 81-89 Brisbane Street, Hobart. *Tel.* 30 8011  
*Acting Secretary:* G. Urquhart
- Lands Department, 134 Macquarie Street, Hobart. *Tel.* 30 8033  
*Director-General:* R. H. Annells
- Law Department—  
Attorney-General's Division, Savings Bank of Tasmania Building, 39 Murray Street, Hobart.  
*Tel.* 30 8022  
*Secretary:* J. A. Ramsay  
Registrar-Generals Division, 134 Macquarie Street, Hobart. *Tel.* 30 8011  
*Registrar-General and Recorder of Titles:* E. R. Thorpe  
Crown-Solicitor's Division, Savings Bank of Tasmania Building, 39 Murray Street, Hobart.  
*Tel.* 30 8022  
*Solicitor-General:* Vacant  
Prisons Division, East Derwent Highway, Risdon. *Tel.* 43 8022  
*Acting Controller of Prisons:* J. Howe
- Licensing Board (Liquor), Henty House, Civic Square, Launceston. *Tel.* 003 32 2261  
*Commissioner for Licensing:* R. B. Middleton
- Local Government Office, 30 Davey Street, Hobart. *Tel.* 30 8011  
*Director of Local Government:* D. B. Shirley
- Main Roads, Department of, 10 Murray Street, Hobart. *Tel.* 30 8033  
*Director:* L. J. Bailly
- Mental Health Services Commission, 141 Hampden Road, Battery Point. *Tel.* 30 8022  
*Chairman and Medical Commissioner:* Dr. J. Tooth
- Metropolitan Transport Trust, 49 Macquarie Street, Hobart. *Tel.* 38 3232  
*General Manager:* T. M. C. Maclurkin
- Metropolitan Water Board, 183 Macquarie Street, Hobart. *Tel.* 30 8033  
*Chairman:* D. G. Schaffner
- Mines Department, GPO Box 56, Gordon's Hill Road, Rosny Park. *Tel.* 30 8033  
*Director:* H. Murchie
- National Parks and Wildlife Service, 16 Magnet Court, Sandy Bay. *Tel.* 30 8033  
*Director:* P. Murrell
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## State Government Departments and Officials (a)—continued

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- Office of Parliamentary Counsel, AMP Building, 80 Collins Street, Hobart. Tel. 30 8011  
*Parliamentary Counsel:* J. Smith
- Parliament, State, Murray Street, Hobart. Tel. 30 8011  
*Clerk of Legislative Council:* A. J. Shaw  
*Clerk of House of Assembly:* P. T. Mackay
- Police Department, 80 Elizabeth Street, Hobart. Tel. 38 1101  
*Commissioner:* M. J. Robinson, QPM
- Premier's Department, Executive Building, Franklin Square, Hobart. Tel. 30 8011  
*Secretary:* J. O. Green
- Public Service Arbitrator, Reserve Bank Building, 111 Macquarie Street, Hobart. Tel. 30 8011  
*Arbitrator:* O. H. Pamplin
- Public Service Board Department, TGIO Building, 144 Macquarie Street, Hobart. Tel. 30 8011  
*Chairman:* A. M. Cornish
- Public Trust Office, 446 Elizabeth Street, Hobart. Tel. 30 8011  
*Public Trustee:* W. D. Craig
- Racing and Gaming Commission, 144 Macquarie Street, Hobart. Tel. 30 8011  
*Chairman:* P. J. Power
- Rivers and Water Supply Commission, Marine Board Building, 1 Franklin Wharf, Hobart. Tel. 30 8033  
*Chairman:* D. G. Schaffner
- State Emergency Service, 81-83 Melville Street, Hobart. Tel. 30 8011  
*Director:* M. J. Robinson, QPM
- State Library of Tasmania, 91 Murray Street, Hobart. Tel. 30 8033  
*State Librarian:* L. W. Brown
- Supply and Tender Department, Castray Esplanade, Hobart. Tel. 30 8033  
*Manager:* D. D. Wallace
- Supreme Court and Sherriff's Department, Salamanca Place, Hobart. Tel. 30 8022  
*The Registrar:* J. Dale
- Tasmanian Fire Service, 79 Melville Street, Hobart. Tel. 30 8033  
*Commissioner:* J. D. Stewart
- Tasmanian Government Insurance Office, 144-148 Macquarie Street, Hobart. Tel. 30 8011  
*General Manager:* A. L. Eiszele
- Tasmanian Museum and Art Gallery, 5 Argyle Street, Hobart. Tel. 23 2696  
*Director:* D. R. Gregg
- Totalizator Agency Board, 28 Davey Street, Hobart. Tel. 34 7744  
*Chairman:* P. J. Power
- Tourism, Department of, Marine Board Building, 1 Franklin Wharf, Hobart. Tel. 30 8011  
*Director:* G. J. Dean
- Town and Country Planning Commission, 30 Davey Street, Hobart. Tel. 30 8011  
*Commissioner:* N. L. Lynham
- Transport Tasmania, 1 Collins Street, Hobart. Tel. 38 9201  
*Commissioner:* R. W. J. Morris
- Treasury Department, Treasury Building, Murray Street, Hobart. Tel. 30 8011  
*Under Treasurer:* I. G. Inglis
- University of Tasmania, 301 Sandy Bay Road, Sandy Bay. Tel. 23 0561  
*Vice Chancellor:* Professor A. Lazenby
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(a) As at 1 December 1983.

NOTE: All principal offices shown above are located in the 002 STD area unless otherwise indicated.

### OMBUDSMAN

Following passage of the *Ombudsman Act* 1978, Tasmania's first Ombudsman Mr. C. R. Woodhouse, was appointed in June 1979 for a five-year term. The Act came into force on 10 September 1979.



### *Role and Powers*

The Ombudsman is empowered by the *Ombudsman Act* 1978 and delegation from the Commonwealth Ombudsman to investigate complaints from citizens about administrative acts of State and Commonwealth Government departments, State statutory authorities, prescribed Commonwealth authorities and local government authorities. The Ombudsman, who is appointed by the Governor, is independent of any authority or Minister of the Government and is answerable to the Parliament of Tasmania. The Parliament may refer any matter within the Ombudsman's jurisdiction to him for investigation and report. The Ombudsman system provides a free, expeditious and informal means for the ventilation of grievances of citizens who feel aggrieved by administrative decisions or omissions. This involves carrying out impartial inquiries at a high level and making recommendations for the resolution of grievances where appropriate.

The Ombudsman's investigatory powers include those of a Board of Inquiry referred to in Section 14 of the *Evidence Act* 1910 including the power to enter and inspect any premises occupied or used by a public authority. Fines of up to \$1 000 are provided in cases where persons are found guilty of an offence under the *Ombudsman Act* by not co-operating with the Ombudsman.

### *Jurisdiction*

A person may complain to the Ombudsman about any decision, act, omission, proposal or recommendation relating to a matter of administration by a Government department, a State or prescribed Commonwealth authority set up by an Act of Parliament, or any local government authority or by their officers. The State Ombudsman's jurisdiction is limited by Parliament—it does not extend to: (i) action taken for the purpose of promotion of legislation; (ii) acts of counsel or legal advisers to the Crown or a public authority; (iii) judicial matters or acts; (iv) conditions of service determined under part V of the *Public Service Act*; (v) matters where a person has a right to review or legal remedy, unless the Ombudsman considers it is not reasonable for that person to resort to such action; (vi) acts of private persons, businesses or companies; or (vii) acts of the Auditor-General. Similar restrictions apply to the Ombudsman's delegated Commonwealth jurisdiction.

### *Complaints*

Any person who considers that he has not been properly or fairly dealt with or who feels he has suffered an injustice as the result of any administrative act of a Government department or authority or any local government authority or their officers may take his grievance to the Ombudsman. The complaint should be made to him by the person directly affected by the administrative act complained of or, if the complainant so wishes, by a Member of Parliament on his behalf or, if the complainant is unable to act for himself, by some other person on his behalf. Corporate or unincorporate bodies may also make complaints.

Complaints may be brought to the notice of the Ombudsman by telephone, personal visit or by letter but it is generally preferable that a complaint be made in writing. There are no forms to fill in but a detailed account of the matter complained about with appropriate references to or copies of any correspondence with the Department, etc. involved, is desirable.

Grievances should be submitted without delay and within two years (State) or one year (Commonwealth) after the cause of the complaint has arisen. It is usually required that a person first endeavours to remedy his complaint by direct approach to the principal officer of the department, etc. concerned. If satisfaction is not obtained, he should proceed promptly to lodge his complaint with the Ombudsman.

Conduct of inquiries by the Ombudsman is essentially informal. He is not required to hold any formal hearings and he may regulate his procedures as he sees fit. All

investigations are conducted in private; privacy of communication of complaints is extended to persons in the care or custody of government institutions. All complainants are informed of the final results of the Ombudsman's investigations.

## ACTS OF STATE PARLIAMENT

### Summary of State Acts, 1982

The examples below illustrate the interpretation of the notations used in the following list of Acts:

- (A 1952)—An Act to amend an Act of the same title passed in 1952.
- (A Audit Act 1952)—An Act to amend an Act of this title passed in 1952.
- (R 1952)—An Act to repeal an Act of the same title passed in 1952.
- (R Audit Act 1952)—An Act to repeal an Act of this title passed in 1952.
- (P 1952)—An Act to be incorporated and to be read as one with the Principal Act passed in 1952.
- (P Audit Act 1952)—An Act to be incorporated and to be read as one with the Principal Act of this title passed in 1952.
- (RS 1952)—An Act to repeal an Act of the same title passed in 1952 and to substitute new legislation.
- (RS Audit Act 1952)—An Act to repeal an Act of this title passed in 1952 and to substitute new legislation.

Where an Act amends an earlier Act or is to be incorporated and reads as one with the Principle Act, the year quoted in brackets (e.g. A 1952) refers to the year in which the Principal Act was passed; all subsequent amendments are inferred.

### State Acts, 1982

<i>Act no.</i>	<i>Short title</i>	<i>Summary</i>
1	Gordon River Hydro-Electric Power Development	Provided for construction of a power scheme in south-west Tasmania.
2	Consolidated Revenue Fund Supply 1982-83	Application of funds from Consolidated Revenue for year to 30 June 1983.
3	Loan Fund Supply 1982-83	Application of Loan Funds for year ended 30 June 1983.
4	Tasmanian Symphony Orchestra (Financial Assistance)	Contributions by State and Local Governments to support the Tasmanian Symphony Orchestra.
5	Housing Agreement	Authorised a Commonwealth - State Housing Assistance Agreement.
6	Consolidated Revenue Fund Appropriation (No. 2) 1981-82	Issue and application of funds from Consolidated Revenue.
7	Companies (Application of Laws)	Provided for the formation and regulation of companies.
8	Companies Auditors and Liquidators Disciplinary Board	The constitution and powers of the board.
9	Companies and Securities Legislation (Miscellaneous Amendments)	Amended the <i>Companies (Application of Laws) Act 1982</i> .
10	Retirement Benefits	Consolidated and amended law relating to retirement benefits paid by the State.
11	Petroleum (Submerged Lands)	Provided for exploration of petroleum resources.
12	Coastal and Other Waters (Application of State Laws)	Applied certain Tasmanian laws to coastal waters.
13	Potato Industry Act Repeal (A 1977)	Repealed Act and consequential dissolution of the Potato Industry Authority.
14	Parliamentary Salaries and Allowances Amendment (A 1973)	Provided salary and allowances for the secretary to cabinet.
15	Parliamentary Superannuation Amendment (A 1973)	Further provided for pensions for members of parliament.
16	Constitution Amendment (A 1934)	Reduction of the number of ministries.
17	Queen Victoria Hospital Amendment (A 1952)	Expenditure by board of management.

*continued next page*

State Acts, 1982—continued

18	Podiatrists Registration Amendment (A 1974)	Further provided for the Podiatrists Registration Board.
19	Launceston Gas Company	Declared the Company a body corporate and related matters.
20	Commercial Banking Company of Sydney Limited (Merger)	With the National Bank of Australasia Ltd.
21	Commercial Bank of Australia Limited (Merger)	With the Bank of New South Wales.
22	Coroners Amendment (A 1957)	Notification of certain deaths.
23	Conveyancing and Law of Property Amendment (A 47 Vict)	Further powers for the making of regulations.
24	Workers' (Occupational Diseases) Relief Fund (A 1954)	Contributions to workers' fund.
25	Land Surveyors Amendment (A 9 Edw VII)	Remuneration for members of the surveyors board.
26	Governor of Tasmania	His Excellency's salary and related matters.
27	Hydro-Electric Commission (Doubts Removal)	Remove doubts in relation to construction of certain works.
28	Wrest Point Licence and Development Amendment (A 1968)	Financial guarantee and increased Casino licence fee.
29	Northern Casino Amendment (A 1978)	Increased Casino licence fee.
30	State Sinking Fund Amendment (A 20 Geo V)	Powers and duties of the Board of Commissioners.
31	Tasmanian Film Corporation Amendment (A 1977)	Ministerial directions to corporation.
32	Constitution (Meander and Tamar Legislative Council Electoral Divisions)	Special provisions for sitting members.
33	Criminal Code Amendment (A 14 Geo V)	Constitution and sittings of the Court of Criminal Appeal.
34	Supreme Court Civil Procedure Amendment (A 23 Geo V)	Simultaneous sittings of full court.
35	Local Government Amendment (Contracts) (A 1962)	Contracts to which municipalities are parties.
36	Child Welfare Amendment (A 1960)	Further powers for Children's Courts.
37	Long Service Leave (Casual Wharf Employees)	Granting of long service leave to casual wharf employees.
38	Dairy Produce Amendment (A 23 Geo V)	Further provision for manufacturing dairy produce.
39	Fisheries Amendment (A 1959)	Investment of certain funds.
40	Medical Amendment (A 1959)	Relating to registered chiropractors.
41	Physiotherapists' Registration Amendment (A 1951)	Relating to registered chiropractors.
42	Chiropractors Registration	Regulation and registration of chiropractors.
43	Dental	Consolidate and amend law relating to dentists.
44	Loan Fund Appropriation 1982-83	Issue and application of funds for year ended 30 June 1983.
45	Pay-Roll Tax Amendment (A 1971)	Further provision for exemption.
46	Petroleum Products Business Franchise Licences Amendment (A 1981)	Increased licence fees.
47	Stamp Duties Amendment (A 22 Geo V)	Exempted payment of duty on Home Savings Grant land.
48	Stamp Duties Amendment (No. 2) (A 22 Geo V)	Abolition of certain rates on conveyancing or transfer of real property.
49	Deceased Persons' Estates Duties Amendment (A 22 Geo V)	Abolition of duties.
50	First Home Assistance	Financial assistance for first home buyers.
51	Local Government (Consequential Amendments)	Various amendments as a result of the <i>Local Government (Highways) Act 1982</i> .

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## State Acts, 1982—continued

52	Launceston Corporation Amendment (A 1963)	Consequent upon the <i>Local Government (Highways) Act 1982</i> .
53	Hobart Corporation Amendment (A 1963)	Consequent upon the <i>Local Government (Highways) Act 1982</i> and interest on overdue fees.
54	Consolidated Revenue Fund Appropriation 1982-83	Issue and application of funds from Consolidated Revenue.
55	Prisoners (Interstate Transfer)	Transfer interstate of prisoners.
56	Local Government Amendment (Miscellaneous Fees and Penalties) (A1 1962)	Increasing certain fees and penalties.
57	Local Government (Highways)	Consolidate certain enactments with respect to highways.
58	Water Amendment (A 1957)	Further provision for annual reports of boards.
59	Acting Appointments (Validation)	Validated the acts of certain persons.
60	Evidence Amendment (A1 Geo V)	Admissibility of photographs in legal proceedings.
61	Long Service Leave Amendment (A 1976)	Continuity of employment.
62	Motor Vehicles Taxation Amendment (A 1981)	Repeal of expiry section.
63	Police Offences Amendment (A 26 Geo V)	Restrictions on the use of firearms.
64	Environment Protection Amendment (A 1973)	Limited suspension of sale of fuel over prescribed lead levels.
65	Stamp Duties Amendment (No. 3) (A 22 Geo V)	Exemption of certain instruments from liability for stamp duty.
66	Industrial Development Amendment (A 1954)	Powers of minister relating to development of land purchased.
67	Child Protection Amendment (A 1974)	Change of permanent head's title.
68	Maintenance Amendment (A 1967)	Change of permanent head's title.
69	Adoption of Child Amendment (A 1968)	Change of permanent head's title.
70	Child Welfare Amendment (No. 2) (A 1960)	Change of permanent head's title.
71	Hobart Corporation Amendment (No. 2) (A 1963)	Further provision for provision of annual financial statements and accounts.
72	Campbell Town (Church Street — Partial Closure)	Extinguishment of rights of passage.
73	Local Government Amendment (A 1962)	Municipalities not required to publish financial statements and accounts in the <i>Tasmanian Government Gazette</i> .
74	Police Offences Amendment (No. 2) (A 26 Geo V)	Powers of police under act.
75	Evidence Amendment (No. 2) (A 1 Geo V)	Admissibility of evidence.
76	Local Government Amendment (Municipal Caravan Parks and Camping Grounds) (A 1962)	Extension of municipal trading undertakings.
77	Land Tax (A 1 Geo V)	Prescribing the scales of land tax.
78	Land And Income Taxation Amendment (A 1 Geo V)	Further provision with respect to land tax.
79	Wynyard Airport (Special Provisions)	Operation of airport by Marine Board of Burnie.
80	Devonport Airport (Special Provisions) Amendment (A 1980)	Extension of provisions.
81	Apple and Pear Industry (Miscellaneous Act Repeal) (A 1977)	Dissolution of the Tasmanian Apple and Pear Marketing Authority.
82	Fruit and Vegetables Amendment (A 1953)	Further provision for inspection and grading and to regulate the packing and sale of fruit and vegetables.
83	Apple and Pear Industry (Crop Insurance)	Amend and consolidate the law relating to the insurance of apple and pear crops.

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State Acts, 1982—continued

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84	Consolidated Revenue Fund Supplementary Appropriation 1981-82	Appropriation of a further sum from consolidated revenue.
85	Mining Amendment (A 20 Geo V)	Fees payable under the Act.
86	Business Names Amendment (A 1962)	Fees payable under the Act.
87	Crown Lands Amendment (A 1976)	Granting of marine plant licences.
88	Fisheries Amendment (Marine Farming) (A 1959)	Provision for establishing and conducting marine farms.
89	Marine Amendment (A 1976)	Remove requirement of marine boards to publish annual accounts in the gazette.
90	Miners' Pensions	Payment of pensions and other benefits.
91	Road Safety (Alcohol and Drugs) Amendment (A 1970)	Further provision with respect to persons who drive vehicles after consuming intoxicating liquor.
92	Parliamentary Superannuation Amendment (No. 2) (A 1973)	Limited liability of trustees and appropriation of funds.
93	Public Servants' Retiring and Death Allowances Amendment (A 16 Geo V)	Reimbursement of allowances paid in respect of certain public servants.
94	Regulations (Validation)	Validation of Supreme Court Rules.
95	Wheat Marketing Amendment (A 1979)	Powers of the Australian Wheat Board payments in respect of wheat.
96	Hospitals Amendment (A 8 Geo V)	Placing boards of public hospitals under ministerial control.
97	Companies and Securities Legislation (Miscellaneous Amendments) (No. 2)	Consequential amendments.
98	Local Government Amendment (Rates) (A 1962)	Powers of corporations or municipalities to raise money by rates.
99	Statute Law Revision	Miscellaneous amendments.
100	Local Government Amendment (Rates and Charges Remissions) (A 1977)	Removal of anomalies relating to remissions.
101	Workers Compensation Amendment (A 18 Geo V)	Extending the powers and functions of the nominal insurer.
102	Building Societies Amendment (A 40 Vict)	Purposes for which societies may be established.
103	Public Trust Office Amendment (A 21 Geo V)	Powers of Public Trustee to invest money.
104	Commercial and Inquiry Agents Amendment (A 1974)	Hearing of application licences.
105	Ambulance Service	Establishment and operation of an ambulance service in this State.

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Further References

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## CHAPTER 4

### PUBLIC FINANCE

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## **Chapter 4**

### **PUBLIC FINANCE**

#### **FEDERAL AND STATE GOVERNMENT**

##### **Change in Relationship Since 1901**

Prior to the establishment of the Commonwealth in 1901, the individual States exercised complete autonomy with respect to their raising of revenue and the manner in which this was spent. Due to developments since Federation, the States now have only limited ability to raise the money required for revenue and capital purposes. State revenue is now supplemented by substantial grants from the Federal Government and the raising of loans is under the control of the Australian Loan Council, a body set up under Federal legislation. The emergence of the Federal Government as the dominating influence in the financial transactions of the state governments can be traced to three events:

- (i) under the Constitution the States surrendered the right to levy customs and excise duties, which passed exclusively to the Federal Government;
- (ii) under the 1927 Financial Agreement, the Australian Loan Council became the borrowing agent for the States;
- (iii) during World War II, under the uniform tax scheme, the Federal Government became the sole authority levying taxes upon the income of persons and companies. (Introduction of new federal-state income tax sharing arrangements from 1977-78 has given each State the right to impose a surcharge or grant a rebate on personal income tax levied in its State.)

The result of these changed relationships can be summarised as follows: (i) the Federal Government, with two votes plus a casting vote as against one vote for each of the States, exercises a substantial degree of control over the Australian Loan Council and, consequently, over public investment in government securities; (ii) to carry out functions for which their revenue is inadequate, the States have become heavily dependent on the Federal Government for general and specific grants. The Federal Government is therefore placed in a position to exercise a substantial degree of control over the ordinary public expenditure of the States.

##### **Principal Activities of the States**

The Federal Constitution lists the matters over which the Federal Parliament has power to legislate. Some of those powers are given exclusively to the Federal Government (e.g. defence, customs and excise) but, in many matters, the Federal and State Governments have concurrent powers, Federal law prevailing where there is conflict. Matters other than those listed in the Constitution remain the concern of the States. Principal government activity at state level embraces education, health, and welfare services, the development of internal resources, land settlement, soil conservation, maintenance of law and order and the provision of public utility services such as roads, electricity, public transport and water supply. Such activities are undertaken either by state departments or by statutory and local government bodies created under state legislation. Apart from charges for services (where charges can be levied) the most obvious form of revenue for the discharge of these functions is state taxation but the Federal Government exercises a practical monopoly over the more lucrative tax sources (e.g. income tax, customs and excise, sales tax). A responsibility therefore rests on the Federal Government to supplement state revenues.

## Federal Government Payments To or For Tasmania

## Summary of Federal Government Payments

In the following sections the main forms of Federal Government assistance are described; the following table shows the total annual payments to Tasmania from the Federal Government's Consolidated Revenue Fund:

Federal Government Payments To or For Tasmania  
(\$'000)

Particulars	1980-81	1981-82	1982-83
<i>General Purpose Funds</i>			
Personal income tax entitlement .....	298 602	322 031	362 777
Health grants .....	..	4 747	5 221
Capital grants .....	30 539	30 539	32 076
Total .....	329 141	357 317	400 074
<i>Specific Purpose Payments—Recurrent</i>			
Revenue payments—			
Payments under financial agreement—			
Interest on State debt .....	534	534	534
Sinking fund on State debt .....	2 675	2 816	2 958
Universities .....	24 740	30 403	32 310
Colleges of advanced education .....	r 8 739	8 323	9 459
Technical and further education .....	r 2 154	2 600	3 200
Schools .....	17 565	19 942	24 282
Pre-schools and child care .....	1 871	1 801	1 943
Public hospitals (running costs) .....	43 029	42 361	45 253
Community health .....	2 534	83	..
School dental scheme .....	1 688	..	38
Assistance for local government .....	9 624	11 227	13 582
Rehabilitation centres .....	594	915	1 189
Special employment programs .....	..	..	2 834
Other .....	r 4 275	3 950	5 052
Total recurrent payments .....	r 120 022	124 955	142 634
Capital payments—			
Universities .....	1 043	1 345	1 404
Colleges of advanced education .....	952	377	405
Technical and further education .....	4 772	3 483	3 490
Schools .....	3 988	5 319	5 172
Hospitals .....	3 400	2 400	1 357
Welfare housing .....	10 770	8 964	8 407
Pensioner housing .....	976	992	1 009
Other housing assistance .....	3 760	3 597	7 963
Port Arthur conservation program .....	800	1 200	1 300
Tourist roads assistance .....	..	..	10 000
Roads .....	27 726	30 243	32 406
Second Hobart Bridge .....	6 413	16 441	16 711
Special employment—public housing .....	..	..	1 185
Assistance to primary industry .....	1 191	570	248
Other .....	r 3 805	2 057	5 799
Total capital payments .....	r 69 596	76 988	96 856
Total specific purpose payments .....	r 189 618	201 942	239 490
<i>General and Specific Purpose Payments</i>			
Total payments (a) .....	r 518 759	559 259	639 564
Percentage increase (b) .....	r 11.6	7.9	14.4

(a) This total cannot be identified as such in State accounts since part is taken into Consolidated Revenue Fund, part into Loan Fund, and the balance into Trust and Special Funds.

(b) Over previous year.

### *Financial Assistance Grants*

Under the *Federal States Grants (Income Tax Reimbursement) Act* 1942 the States received general revenue grants for vacating the field of income tax. Various formulae were used to calculate each State's grant. From 1959 to 1975-76 the method was to annually increase the grant by multiplying the previous year's grant by: (i) the State's percentage increase in population; (ii) the percentage increase in average wages for Australia; and (iii) a betterment factor. The betterment factor was: 1.2 per cent from 1965-66 to 1970-71, 1.8 per cent from 1971-72 to 1975-76, and 3.0 per cent for subsequent years.

### *Personal Income Tax Sharing with the States*

Commencing in 1976-77 financial assistance grants were replaced by personal income tax sharing arrangements between the Commonwealth and the States. This was a central element in the 'new federalism' policy of the Fraser Coalition Government. The income tax sharing between the Commonwealth and States was introduced in two stages. The first stage became operative in 1976-77; the second stage required further Commonwealth and State legislation. Federal legislation for Stage 2 was passed during 1977-78.

The principal elements of Stage 1 are:

- (i) The States receive a given percentage (39.87) of the net personal income tax collections for the previous year. This replaced the previous arrangement whereby the amount was 33.6 per cent of the collections for that year. The changes were enacted following the recommendations of the October 1977 Premiers' Conference.
- (ii) For the first four years of the scheme (1976-77 to 1979-80) the Commonwealth guaranteed that no State would receive less than it would have under the old financial assistance grant formula. In 1980-81 the States were guaranteed that each would receive no less in real terms than the amount received in 1979-80 as measured by the Consumer Price Index movement in the capital city of each State for the four quarters to March 1981.
- (iii) The total entitlement for all States is first decided. The amount is then divided between each of the States on the basis of each State's population and a relativity factor based on 1975-76 financial assistance grant receipts.
- (iv) The four less populous States can continue to apply for special grants in addition to their basic income tax sharing entitlements.
- (v) There will be periodic reviews of relativities between States.

In 1982-83 Tasmania received \$363 800 000.

Under Stage 2 each State may legislate to impose a surcharge on personal income tax in the State or to give a rebate of personal income tax payable under Commonwealth law. The State bears the cost of any such rebate. The Commonwealth will collect the surcharge or grant the rebate as the State's agent. In the case of a surcharge levied by one of the four less populous States the Commonwealth will make equalisation arrangements. These will ensure that the State will get the same relative advantage from the surcharge as a State with a broader personal income tax base.

### *Review of Tax Sharing Relations*

After an extensive inquiry commencing in March 1979, the Commonwealth Grants Commission presented its *Report on State Tax Sharing Entitlements* 1981 on 9 June 1981. The Commission found that a change in the State factors which prescribe the per capita relativities between the States was desirable. The assessed factors derived by the Commission on the basis of its interpretation of the fiscal equalisation principles set down in Section 13(3) of the *States (Personal Income Tax Sharing) Act* 1976 in its 1981 report, along with factors prescribed at the time of the report, are shown in a later table, State Factors.

A Premiers' Conference was convened on 20 June 1981 to consider, inter alia, the Commonwealth Grants Commission's *Report on State Tax Sharing Entitlements* 1981. While there had not been adequate time since the Report became available for Governments to complete their studies of it, most States had comments and queries on particular aspects of the report.

A major concern was that the implementation of the assessed factors in 1981-82 would have resulted in large changes in the distribution of financial assistance among the States. The result for Tasmania would have been a reduction of \$64 million. Following discussions it was decided that the Commission should prepare a further report for consideration in early 1982.

Further, in view of the financial difficulties that would be created for South Australia, Western Australia and Tasmania if the distribution between the States of the tax sharing grants for 1981-82 were to be based on the factors assessed by the Commission, it was decided that there would be no change to the relativities contained in the *States (Tax Sharing and Health Grants) Act* 1981 in respect of this year.

Terms of reference for a further review of State relativities were given to the Commission in October 1981. It had to review its assessments contained in the 1981 report using the same principle of fiscal equalisation as set out in Section 13(3) of the *State (Personal Income Tax Sharing) Amendment Act* 1978. Submissions from interested parties and changes in Commonwealth-State financial arrangements since the 1981 report (e.g. health funding) had to be taken into account.

In May 1982 the report was presented. The Commission confirmed its 1981 view that changes in State relativity factors were necessary. The report contained two alternative sets of tax sharing relativities. One reflected relative health needs in the tax sharing grants (as in the 1981 report); the other with relative health needs reflected in an alternative distribution of identified health grants. (At the June 1982 Premiers' Conference it was decided that relative health needs should be reflected in the distribution of tax sharing grants and that the identified health grants should continue to be distributed on the basis set out in the *States (Tax Sharing and Health Grants) Act* 1981.) The following table shows the factors (i) used to calculate the 1981-82 payments to the States; (ii) assessed in the 1981 report; and (iii) assessed in the 1982 report.

State Factors (a)			
State	Factors used to calculate 1981-82 general revenue payments to the States	Factors assessed by the Commission in	
		1981 report	1982 report
New South Wales .....	1.02740	1.048	1.018
Victoria .....	1.00000	1.000	1.000
Queensland .....	1.39085	1.487	1.531
Western Australia .....	1.66516	1.284	1.368
South Australia .....	1.52676	1.319	1.402
Tasmania .....	2.00188	1.549	1.589

(a) State factors show how each State's per capita grant should exceed the per capita grant received by Victoria.

Differences between State shares assessed in the 1981 and 1982 reports were principally caused by: (i) revisions to state populations following the 1981 Census; and (ii) changes in the distribution of health grants under new health funding arrangements agreed between the Commonwealth and States following the 1981 report. (Commission's assessments take account of distribution of *specific purpose* payments such as health grants insofar as such payments are provided to assist the States in funding recurrent expenditures which are subject to commission examination.)

The main effect of the Commission's proposals would have been to shift grants from the less populous to the more populous States. The next table shows the estimated effect on the 1982-83 distribution of Tax Sharing Grants had the Commission's recommendation been adopted:

Alternative Distributions of Estimated 1982-83 Tax Sharing Grants

State	Per capita grants under relativities prescribed in States (Tax Sharing and Health Grants) Act 1981 (a) (\$)	Per capita grants under Commission's assessed relativities in 1982 report (\$)	Differences in grants	
			Per capita grants (%)	Total grants (\$m)
New South Wales .....	443	450	+ 1.6	+ 38
Victoria .....	434	442	+ 1.8	+ 32
Queensland .....	601	676	+12.6	+185
Western Australia .....	705	604	-14.2	-135
South Australia .....	658	619	- 5.9	- 52
Tasmania .....	861	702	-18.5	- 69

(a) Relativities prescribed for 1982-83 under Section 9(5) of the *States (Tax Sharing and Health Grants) Act 1981* differ from existing factors shown in the Commission's report because those in the report do not take account of the need to add certain amounts to the 'basic' grants for 1981-82 in order to arrive at new relativities for determining the 1982-83 grants.

The Commission's 1982 report was discussed at the Premiers' Conference held on 24 and 25 June 1982. The Commonwealth put forward the following proposal:

- (i) Commission's 1982 assessed relativities be modified so that South Australia's and Tasmania's hospital cost sharing grants would not affect their shares of the tax sharing grants;
- (ii) the modified relativities be phased in over three years;
- (iii) a guarantee that each State's tax sharing grant would increase by at least two per cent in real terms in 1982-83 and a further one per cent in real terms in 1983-84 and 1984-85;
- (iv) the escalated value of the amounts the Commonwealth made available in 1981-82 as a contribution towards assisting in the adjustment to new relativities and in 1975-76 in consideration of the transfer of South Australia's and Tasmania's railways to the Commonwealth totalling about \$149 million, be set aside from the tax sharing pool in 1982-83 and used firstly to fund the guarantee with any balance being available for distribution among the States.

A condition of the proposal was that no Special Grants be paid during the phasing-in period. The Premiers' Conference adopted the proposals on this basis. No decision was made on a further review to be completed by June 1985.

#### *Tax Sharing Grants in 1982-83 and Subsequent Years*

Total tax sharing grants payable to the States in 1982-83, 1983-84, and 1984-85 are to be calculated as follows:

- (i) the total tax sharing grant paid to the States in 1981-82 (excluding the \$9 million additional grant to Queensland in respect of the change in the basis of measuring population) to be expressed as a percentage of total tax collections in 1980-81; and
- (ii) that percentage (20.72 per cent) be applied in 1982-83 and in each subsequent year to the previous year's total Commonwealth tax collections to determine the total tax sharing grant payable in the relevant year. The definition of total tax collections for the purposes of these calculations is set down in Schedule 1 of the *States (Tax Sharing and Health Grants) Act 1981*.



Following decisions taken at the June 1982 Premiers' Conference, the States' total share will be divided into two pools, with:

- (i) 20.323 per cent of relevant Commonwealth tax collections to take the form of a 'basic' tax sharing pool; and
- (ii) 0.397 per cent of such collections to form a 'supplementary' tax sharing pool to be used to assist in moving to the new relativities settled at that Conference.

*Distribution of Basic Tax Sharing Grants:* In 1982-83, 1983-84 and 1984-85 the basic tax sharing pool will be distributed on the basis of state populations at 31 December weighted by the per capita relativities shown in the next table:

Relativities to be Applied for Calculating the Basic Tax Sharing Grants						
Year	NSW	Vic.	Qld	WA	SA	Tas.
1982-1983 .....	1.01960	1.00000	1.43516	1.54072	1.49634	<b>1.87261</b>
1983-84 .....	1.01880	1.00000	1.48508	1.45686	1.47567	<b>1.75931</b>
1984-85 .....	1.018	1.000	1.535	1.373	1.455	<b>1.646</b>

Calculation of the estimated basic tax sharing grants to the States are as shown below:

Estimates of Basic Tax Sharing Grants to the States for 1983-84							
Particulars	NSW	Vic.	Qld	WA	SA	Tas.	Six State Total
(1) Estimated population ('000 persons) (a) .....	5 396.1	4 050.3	2 510.1	1 379.6	1 342.3	<b>434.5</b>	15 112.9
(2) Per capita relativities (b) .	1.01880	1.00000	1.48508	1.45686	1.47567	<b>1.75931</b>	
(3) Row (1) weighted by Row (2) .....	5 497.5	4 050.3	3 727.7	2 009.9	1 980.8	<b>764.4</b>	18 030.6
(4) Percentage distribution of Row (3) between States (per cent) .....	30.48978	22.46332	20.67411	11.14713	10.98608	<b>4.23958</b>	100.0
(5) Estimated Distribution of Basic Tax Sharing Grants (\$ million) (c). .	2 500.0	1 841.9	1 695.1	914.0	900.8	<b>347.6</b>	8 199.4

(a) Projections of resident population at 31 December 1983. Subject to revision.

(b) Adjustment factor as set out in S. 11A (1) of the *States (Tax Sharing and Health Grants) Act 1981* (the Act).

(c) 20.323 per cent of total Commonwealth tax collections in 1982-83 distributed among the States in accordance with percentage shares set out in row (4) as set out in S. 11B of the Act.

*Distribution of Supplementary Grants:* These grants are to be distributed as follows:

- (i) amounts are to be set aside from the supplementary pool where necessary to ensure that the sum of each State's basic and supplementary tax sharing grants increases by 2 per cent in real terms in 1982-83 over the previous year (one per cent in real terms in both 1983-84 and 1984-85);
- (ii) any portion of the supplementary pool not used for the purpose of (i) above is then distributed between all the States on the basis of the phased-in relativities effective in the year concerned;
- (iii) the actual amount of the guarantee payment for a State is determined by subtracting the amount for each State resulting from (i) above from the amounts resulting from (ii) above in those cases where the amount in (i) is greater than the amount in (ii);
- (iv) the difference between the total of the actual guarantee payments under (iii) and the total of the amounts set aside from the supplementary pool under (i) is then distributed among those States not in receipt of an actual guarantee payment on the basis of the phased-in relativities effective each year.

Each State's share of the supplementary pool is then equal to the sum of its share of the residual supplementary pool under (ii) and either its guarantee payment under (iii) or its share under (iv).

The total amount of supplementary tax sharing grants distributed in 1982-83 was \$148.9 million Tasmania's share was \$18.6 million. The estimated amount for 1983-84 is \$358.4 million and Tasmania's share will be \$51.0 million.

*Tax Sharing Grants 1982-83:* Total tax sharing grants for 1982-83 were the sum of the basic tax sharing and the supplementary tax sharing grant. Amounts for each State are shown in the following table:

Total Tax Sharing Grants, 1982-83		
State	Amount (\$m)	Increase over 1981-82 amount (percent)
New South Wales .....	2 361.8	16.1
Victoria .....	1 743.4	16.0
Queensland .....	1 527.4	21.3
Western Australia .....	913.1	12.7
South Australia .....	864.1	13.5
<b>Tasmania .....</b>	<b>362.8</b>	<b>12.7</b>
Total .....	7 772.5	16.2

#### *Special Grants (Section 96 of the Constitution)*

Section 96 of the Constitution reads: 'During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.'

The Commonwealth Grants Commission was established in 1933 and consists of three members on a part-time basis assisted by a full-time staff. In its third report (1936) it fixed upon the principle of financial need, which was expressed in the following terms: 'Special grants are justified when a State through financial stress from any cause is unable efficiently to discharge its functions as a member of the federation and should be determined by the amount of help found necessary to make it possible for that State by reasonable effort to function at a standard not appreciably below that of other States'. In arriving at its recommendations, the Commission each year makes a detailed comparison of the budget results of the claimant States with those of the non-claimant States.

Prior to the passage of the *Federal States Grants Act 1959*, the claimant States had been Tasmania, WA and SA. The new formula evolved under the *States Grants Act 1959* had been devised partly in reaction to a claim by Victoria and Queensland to be also considered as claimant States; in effect, the new scale of increased grants under this legislation resulted in the number of claimant States falling to two, WA and Tasmania. The Grants Commission could then have used the accounts of the four non-claimant States to reach a basis for comparison; it finally decided to adopt a two-state standard, based on the budgets of NSW and Victoria. Recent developments have included: (i) the withdrawal of WA as a claimant State from 1968-69; (ii) the acceptance of SA as a claimant State from 1970-71; (iii) the acceptance of Queensland as a claimant State from 1971-72; (iv) the withdrawal of Tasmania as a claimant State from 1974-75; and (v) the withdrawal of SA as a claimant State from 1975-76.

On 11 June 1974 the Premier announced Tasmania's withdrawal as a claimant State for a Special Grant under Section 96 of the Commonwealth Constitution. The announcement was of historic significance for the State for two reasons:

- (i) In 1912-13 Tasmania first obtained a Special Grant under Section 96 of the Commonwealth Constitution and from that time until 1973-74 had received a special grant each year.
- (ii) In 1933 the Grants Commission was established to examine the claims of States requesting special grants to assist their revenues. From 1933 until 1973-74 Tasmania had had a continuous association with the Grants Commission and its determinations had considerably influenced the State Government's financial policies.

Tasmania's withdrawal from the Grants Commission's Special Grants procedures became operative for the 1974-75 financial year giving the State Treasurer greater freedom in planning the State's finances. However, some of the protection afforded by the special grant against any sudden unexpected deterioration of the State's financial position was lost.

The financial arrangement for the withdrawal was that \$15m would be added to the State's Financial Assistance Grant for 1974-75 and that the total receipt, including the \$15m, would become the base for calculating the 1975-76 Financial Assistance Grant. Also, as part of the withdrawal arrangement, Tasmania's 1972-73 and 1973-74 advance special grants were not subject to final adjustment.

For details of the method by which Special Financial Assistance Grants were paid to Tasmania, reference should be made to Year Books prior to the 1976 edition.

#### *Payments Under the Financial Agreement (1927)*

Under the Financial Agreement, which was entered into by the Federal Government and the States in 1927, the Federal Government contributes towards interest and sinking fund payments in respect of State debts existing at 30 June 1927, and towards sinking fund payments in respect of State debts incurred after that date for purposes other than the funding of revenue deficits. The Federal Government's contribution to Tasmania to assist with the payment of interest on state debt was set at an annual sum of \$533 718, to continue until 1985.

The sinking fund contributions made by the Federal Government under the Agreement in respect of State debts vary according to the date and nature of the borrowings. On State debts existing at 30 June 1927 the Federal Government is making sinking fund contributions at the rate of 0.125 per cent a year until 1985 and in respect of cash loans raised for the States since that date, the Federal Government makes sinking fund payments for 53 years at the annual rate of 0.25 per cent. Each State is obliged to make sinking fund payments for corresponding periods at the rate of 0.25 per cent per annum regardless of the date on which the debt was incurred. The only exception is in relation to debt incurred for the purpose of funding revenue deficits. In these instances, the Federal Government makes no sinking fund contributions and the States are obliged to make annual contributions to the sinking fund of not less than four per cent. However, in respect of Treasury Bills issued to cover States' revenue deficits accruing between July 1927 and June 1935, special arrangements were made under which the Federal Government contributes 0.25 per cent per annum on the amount outstanding until June 1983.

Recent Federal Government sinking fund contributions in respect of the Tasmanian public debt are shown in the following table:

**Federal Government Contributions to National Debt Sinking Fund: Tasmanian Debt (\$'000)**

<i>Year</i>	<i>Amount</i>	<i>Year</i>	<i>Amount</i>
1977-78 .....	2 225	1980-81 .....	2 675
1978-79 .....	2 386	1981-82 .....	2 813
1979-80 .....	2 544	1982-83 .....	2 958

The acceptance of some Federal Government liability for interest and sinking fund payments on State debts was only one part of a more extensive agreement setting up an

Australian Loan Council and a National Debt Sinking Fund. The raising of loan money for the States under the Agreement is described later in this chapter.

#### *New Assistance for Debt Charges*

At the 1970 February Premiers' Conference, the Federal Government announced it was prepared to take over State debt totalling \$1 000m during the five-year period 1970-71 to 1974-75. However, this would have necessitated amendments to the 1927 Financial Agreement and caused considerable delay. The Federal Government then proposed an alternative which involved grants to the States equal to interest on specific parcels of State debt. The distribution between the States was in proportion to Federal Government securities on issue on behalf of each State at 30 June 1978.

The 1927 Financial Agreement brought into effect by the *Financial Agreement Act* 1928 was amended during 1975-76 with retrospective effect from 30 June 1975. The total of \$1 000m of State debt was formally transferred to the Commonwealth.

#### *Grants for Non-reproductive Capital Works*

To assist the States in meeting their capital works programs since 1970-71, the Federal Government has provided annual grants for financing non-reproductive capital works. Total approved borrowing programs from 1976-77 to 1982-83 have been (in \$m): 1976-77, 1 356; 1977-78, 1 434; 1978-79, 1 434; 1979-80, 1 245; 1980-81, 1 307; 1981-82, 1 307; and 1982-83, 1 373. The proportion of the total States' capital works program provided by Federal Government grants in this period has been: 33.3 per cent.

Distribution of the grants was by agreement between the States or by the Federal Government if the States failed to reach agreement. Tasmania's share of the 1982-83 grant was \$32.1m which was credited to the State's Loan Fund.

The provision of these grants reduces the amount which the State needs to borrow in order to carry out its capital works program and eases the burden of debt charges (interest payments and sinking fund contributions) on the Consolidated Revenue Fund.

#### *Federal Government Aid for Roads*

Financial assistance to the States for roads during the triennium 1977-78 to 1979-80 was mainly provided under the *Federal State Grants (Roads) Act* 1977. The Act was based on the former Commonwealth Bureau of Roads' *Report on Roads in Australia* 1975. The Federal Government decided to make \$475m available to the States in 1977-78 and that the total grants in 1978-79 and 1979-80 would be equivalent in real terms to the 1977-78 grant. The legislation also established expenditure quotas for each State to be met from its own funds.

Over the five years 1980-81 to 1984-85, the Commonwealth is to provide \$3 650m to the States and the Northern Territory as grants for road construction and maintenance. Estimated payments to the States during 1982-83 were \$709m (7.2 per cent higher than the 1981-82 payments of \$662m).

The Commonwealth also provides aid to the States for planning and research projects related to roads. For the three years 1977-78 to 1979-80 the assistance was paid under the *Transport Planning and Research (Financial Assistance) Act* 1977. For 1977-78 the Commonwealth met two-thirds of the expenditure on approved programs of projects and has met one half of such expenditure in subsequent years. Following the recent Review of Commonwealth Functions, Commonwealth assistance for this purpose was terminated at the end of 1980-81.

The following table shows amounts received by Tasmania for recent years for general road expenditure and for transport planning and research projects:

**Federal Government Aid for Roads: Payments to Tasmania**  
(\$'000)

Year	Payments for roads (a)	Payments for transport planning and research (b)
1977-78 .....	21 700	195
1978-79 .....	23 208	173
1979-80 .....	24 944	186
1980-81 .....	27 726	168
1981-82 .....	30 243	—
1982-83 .....	32 406	—

(a) Grants paid under general roads Acts.

(b) Grants paid under the *Urban Public Transport (Research and Planning) Act 1974*, *Transport (Planning and Research) Act 1974* and the *Transport Planning and Research (Financial Assistance) Act 1977*.

*Assistance Related to South West Tasmania*

The Commonwealth Government is providing compensation to Tasmania following the termination of the Gordon River Power Development Stage Two. Financial assistance is related to alternative employment projects for contractors and employees who cannot be redeployed to alternative projects in the short term. Estimated assistance payments for 1983-84 were \$27.0 million.

**Loan Council (Financial Agreement)**

The original Financial Agreement was made on 12 December 1927, but Tasmania did not become a party to it until 1 July 1928. The basic intention of the agreement was a co-ordinated approach to the loan market, the establishment of sound sinking fund arrangements and the sharing of State debt charges with the Federal Government. The main provisions are summarised below:

- (i) The Federal Government assumed certain liabilities in respect of state debts (see previous section on interest and sinking fund payments made by the Federal Government in respect of Tasmanian State debt—'Payments under the Financial Agreement 1927').
- (ii) The Australian Loan Council was set up to co-ordinate the public borrowings of the Federal Government and the States. It consists of the Prime Minister (or his nominee) as chairman, and the State Premiers (or their nominees). Each financial year the Federal Government and the States submit programs to the Loan Council setting out the amounts they desire to raise by loan during the next year. Revenue deficits to be funded are included in the borrowing programs but borrowing by the Federal Government for defence purposes is excluded from the terms of the agreement.

If the Loan Council decides that the total amount of the loan programs for the year cannot be borrowed at reasonable rates and conditions, it then decides the amount which shall be borrowed and may, by unanimous decision, allocate that amount between the Federal Government and the States. In default of a unanimous decision, the Federal Government is entitled to one-fifth of the total amount to be borrowed and each State to a proportion of the remainder equal to the ratio of its net loan expenditure in the preceding five years to the net loan expenditure of all States during the same period.

Subject to the decisions of the Loan Council the Federal Government arranges all borrowings, including those for conversions, renewals and redemptions. However, the Federal Government or a State may borrow for 'temporary purposes' by way of overdraft or fixed deposit, subject to limits fixed by the Loan Council. In addition, the Federal Government may borrow within Australia, or a State within its own territory, from authorities, bodies, institutions, or from the public

by counter sales of securities, subject to Loan Council approval. Federal Government securities are issued for money borrowed in this way and amounts so borrowed are treated as part of the borrowing program for the year.

- (iii) The agreement involved setting up a National Debt Commission to administer one consolidated sinking fund in respect of the debt of the Federal Government and the States. Sinking fund moneys are used to redeem unconverted securities at maturity and to re-purchase securities on the stock market.
- (iv) It was realised at the inception of the Loan Council that, in the interests of co-ordinated borrowing, the Council should be advised of borrowings of large amounts by semi-government authorities (such loan raisings do not form part of State or Federal Government debt and therefore are not within the scope of the original agreement). A set of rules evolved in 1936 is regarded as the 'Gentlemen's Agreement' and makes provision for the submission to the Council of annual loan programs in respect of larger semi-government and local government authorities (in conjunction with the loan programs of the governments concerned) and for the fixing of the terms of individual loans coming within the scope of the annual program. At the June 1982 meeting of the Loan Council it was agreed that for a trial period of three years the level of domestic borrowing by major electricity authorities (including the Hydro-Electric Commission) would be determined by the respective State Governments. Overseas borrowings by electricity authorities continue to be subject to Loan Council approval. For other larger semi-government and local government authorities (those borrowing more than \$1.2m) Loan Council approval would be required. In 1981-82 the only Tasmanian authority which came within the scope of Council approval was the HEC with a borrowing program of \$34.4 million.

It should be emphasised that the Australian Loan Council does not itself raise money for Tasmanian semi-government and local government authorities; its concern is to assess the total impact of government borrowing for the year and then to fix ceilings for semi-government and local government authorities in the interests of a co-ordinated program.

The following table shows Loan Council borrowings undertaken on behalf of the State of Tasmania to finance new capital works:

**Tasmania: New Cash Borrowings Authorised by Australian Loan Council (a)**  
(\$'000)

<i>Year</i>	<i>Amount</i>	<i>Year</i>	<i>Amount</i>
1977-78 .....	66 992	1980-81 .....	61 080
1978-79 .....	66 992	1981-82 .....	61 080
1979-80 .....	58 171	1982-83 .....	64 151

(a) For State works programs; amounts credited to State Loan Fund.

The previous table excludes allocations under the Federal Government and State Housing Agreements, which were also part of the Loan Council's program. The following table shows allocations to Tasmania for housing purposes:

**Tasmania: Allocations for Housing**  
(\$'000)

<i>Year</i>	<i>Amount</i>	<i>Year</i>	<i>Amount</i>
1977-78 .....	25 220	1980-81 .....	10 770
1978-79 .....	20 436	1981-82 .....	8 964
1979-80 .....	10 352	1982-83 .....	8 407



## STATE FINANCIAL TRANSACTIONS

## Tasmanian Public Account

The State Public Account includes the Consolidated Revenue Fund, the Trust and Special Funds, and the Loan Fund. Revenue from State taxation, Federal Government financial assistance grants and other departmental sources is paid into the Consolidated Revenue Fund. Main expenditures from it are for education, health and hospitals, roads, law and order, public debt charges, and subsidies to State business undertakings. The Trust and Special Funds cover special transactions outside the ordinary operations of departmental expenditure, such as funds from the Federal Government for specific purposes and moneys held for expenditure by the State at some future time. The Loan Fund receives its funds from public borrowings and grants, and the main expenditure is on State public works and on advances to State business undertakings.

A summary of transactions on the Tasmanian Public Account is given in the following table:

Public Account: Summary of Transactions, Tasmania  
(\$'000)

Particulars	1979-80	1980-81	1981-82	1982-83
Cash and investments at beginning of year .....	19 734	15 918	13 090	4 773
Receipts—				
Consolidated Revenue Fund .....	560 192	620 307	683 231	764 990
Borrowings for new capital purposes .....	58 171	61 080	61 080	54 071
Other Loan Fund receipts .....	58 677	54 751	52 369	69 541
Net increases, Trust and Special Funds .....	1 566	—2 792	9 933	13 343
Total .....	678 606	733 346	806 613	901 945
Expenditure—				
Consolidated Revenue Fund .....	(a) 560 617	627 441	717 628	772 735
Loan Fund, public works and purposes .....	121 805	r (b) 108 734	(b) 97 302	(b) 97 447
Total .....	682 422	r 736 175	814 930	870 182
Percentage increase .....	11.1	7.9	6.8	6.8
Cash and investments at end of year .....	15 918	13 090	4 773	36 535

(a) Excludes \$3.3m transferred to Loan Fund.

(b) Excludes transfers from Loan Fund for deficit funding: 1980-81, \$6.057m; 1981-82, \$7.133m; 1982-83, \$34.397m.

The State Public Account is a complete record of the Government's operation of three specific funds, i.e. Consolidated Revenue, the Trust and Special Funds, and the Loan Fund. It is by no means a complete record of government activity, since statutory authorities and semi-government authorities such as the Hydro-Electric Commission, Transport Commission and Agricultural Bank carry on financial operations which are not recorded in the State Public Account. In a later section of this chapter under the heading 'Exclusions from Consolidated Revenue', the relationship between the finances of the principal authorities and the Consolidated Revenue Fund is described; the general principle is that gross receipts and expenditure of the authorities are excluded from the Public Account.

In the following table are shown the balances credited to each fund constituting the Public Account and the form in which the balances are held:

**Public Account: Summary of Balances at 30 June, Tasmania**  
(S'000)

Year	Balance				Location			
	Accumulated Revenue Account	Loan Fund	Trust and Special Funds	Total	Cash in Treasury or bank	Advanced to departments	Govt. and other securities (a)	Total
1978 .....	- 6 443	265	18 571	12 393	- 8 849	1 454	19 788	12 393
1979 .....	- 2 332	1 679	20 387	19 734	-11 153	1 435	29 452	19 734
1980 .....	- 6 057	21	21 954	15 918	- 8 138	1 400	22 656	15 918
1981 .....	- 7 133	1 062	19 162	13 090	- 7 637	1 360	19 367	13 090
1982 .....	-34 397	10 075	29 095	4 773	-17 638	1 291	21 119	4 773
1983 .....	- 7 745	1 842	42 438	36 535	-16 533	1 512	51 558	36 535

(a) Includes fixed deposits.

In the previous table, 'Accumulated Revenue Account' is a suspense account recording accumulated surpluses and deficits in the Consolidated Revenue Fund, and also the funding of deficits. Details of the account are as follows:

**Accumulated Revenue Account: Summary of Transactions, Tasmania**  
(S'000)

Year	Transactions			
	Opening balance	Budget result, Consolidated Revenue	Deficits charged to Loan Fund (a)	Closing balance
1977-78 .....	+ 1 583	- 6 443	- 1 583	- 6 443
1978-79 .....	- 6 443	+ 2 861	+ 1 250	- 2 332
1979-80 .....	- 2 332	- 3 725	—	- 6 057
1980-81 .....	- 6 057	- 7 133	+ 6 057	- 7 133
1981-82 .....	- 7 133	-34 397	+ 7 133	-34 397
1982-83 .....	-34 397	- 7 745	+34 397	- 7 745

(a) See later section in this chapter 'Deficit Funding'.

In the following section dealing with Consolidated Revenue, Treasury practice of eliminating special grant adjustments from Consolidated Revenue total receipts has been followed.

### Consolidated Revenue Fund

#### General

The financial transactions of the State of Tasmania are recorded under: (i) Consolidated Revenue; (ii) Trust Funds; and (iii) Loan Fund.

Payments from Consolidated Revenue are made only on the basis of authority found in: (i) the annual Appropriation Act of Parliament; (ii) Acts of the Parliament made in previous years and under which certain annual payments are classified as 'reserved by law'; and (iii) the *Public Account Act* 1957 (as amended in 1962) and the *Audit Act* 1918.

The third category of authority listed above is designed to give the Treasurer and the Government some flexibility in public expenditure since the *Appropriation Act* cannot be expected to anticipate, to the nearest dollar, the expenses that are likely to be incurred for each and every item. The relevant sections of the amended *Public Account Act* are 5A and 5B. These provide that, in relation to Consolidated Revenue, the Treasurer may authorise transfers between votes within certain sub-divisions of the appropriation and, on the authority of the Governor, supplement certain appropriations and provide funds to meet expenditure for which no other provision exists. Transfers, as described under 5A, are a matter for the Treasurer but additional expenditure, as described under 5B needs

ratification by Parliament before the close of the following financial year. Regulations 20 and 21 of the second schedule of the *Audit Act* provide for expenditure by the Treasurer to meet emergencies for which no vote exists; the Governor must first authorise such expenditure and the Auditor-General investigate the circumstances before payment can be made.

#### *Exclusions from Consolidated Revenue*

It should be observed that the Consolidated Revenue Fund does not include all revenue and expenditure in respect of activities undertaken or authorised by the State Government. Some moneys are paid directly into State Trust Funds; e.g. Federal Government assistance for roads is paid into the State Highways Trust Fund and the various expenditures on roads are made directly from that Fund. The gross receipts and payments of a number of State business undertakings and State authorities are excluded from the Consolidated Revenue Fund, their relation to the Fund being as follows:

- (i) The *net* loss incurred by the Transport Commission each year is met from the Consolidated Revenue Fund. The Commission's net loss occurs principally in respect of government shipping services which it administers. The Commission's gross receipts and expenditure are excluded from the Fund.
- (ii) Omnibus services in Hobart, Launceston and Burnie are operated by the Metropolitan Transport Trust. The *net* annual loss of the authority is a charge against Consolidated Revenue. Annual payment of debt charges on Government advances is credited to the Fund.
- (iii) The gross receipts and expenditure of the Hydro-Electric Commission are excluded from the Consolidated Revenue Fund; however the annual payment of debt charges by the Commission is credited to the Fund. Net profit or loss on the Commission's activities is carried forward in the authority's own suspense account. From 1971-72 the Commission has been required to pay an annual contribution to Consolidated Revenue. The amount was five per cent of the total revenue derived from retail sales of electricity in the preceding year, until January 1977, when it was reduced to 2½ per cent and eventually eliminated from January 1978. However, the five per cent tax on revenue was re-introduced in January 1979.
- (iv) Also excluded from the Consolidated Revenue Fund are the gross receipts and payments of: regional water schemes, Government Printing Office, Government Insurance Office, Public Trustee, State housing authorities, closer settlement, rural credits and other activities of the Agricultural Bank, etc. In accordance with various acts, it is usual for the net profits or losses of the previous year to be paid to or from the Consolidated Revenue Fund for the current year. Debt charges on Government money loaned to the authorities are paid to Consolidated Revenue.

#### *Consolidated Revenue Fund—Summary*

The following table shows the transactions of the Tasmanian Consolidated Revenue Fund, the surplus or deficit, and the aggregate deficit at the end of each year:

**Consolidated Revenue Fund: Surpluses and Deficits, Tasmania**  
(\$'000)

<i>Year</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Budget Result</i>	<i>Aggregate funded deficit at end of year</i>
1977-78 .....	444 263	450 706	— 6 443	48 351
1978-79 .....	495 822	492 961	+ 2 861	45 490
1979-80 .....	560 192	563 917	— 3 725	49 214
1980-81 .....	620 307	627 441	— 7 133	56 348
1981-82 .....	683 231	717 628	— 34 397	90 745
1982-83 .....	764 990	772 735	— 7 745	98 490

At 30 June 1983 the sum of \$98 490 000 had been charged against the Loan Fund as 'revenue deficits funded'; \$7 745 000 was carried as a negative balance in the Accumulated Revenue Account.

### Consolidated Revenue Fund—Receipts

The following table shows Tasmanian Consolidated Revenue Fund receipts for recent years:

Consolidated Revenue Fund: Receipts, Tasmania (\$'000)			
Item	1980-81	1981-82	1982-83
Federal Government sources—			
Financial agreement .....	534	534	534
Income tax entitlement .....	298 602	322 031	362 778
Education .....	14 221	14 813	17 172
Health (a) (b) .....	51 496	52 826	56 331
Social welfare .....	704	32	164
Local Government .....	9 624	11 227	13 582
Other services .....	..	307	338
Total .....	375 181	401 770	450 899
Debt charge recoveries (c)—			
Interest .....	55 697	63 268	77 579
Sinking fund .....	5 651	5 829	6 122
Total .....	61 348	69 097	83 701
State taxation (d) .....	r 129 216	150 230	155 822
Victorian Lotteries Agreement .....	4 953	8 737	10 455
Territorial revenue—			
Forestry .....	11 164	12 232	11 501
Other property income, etc. ....	8 263	7 909	7 547
Total .....	19 428	20 141	19 047
Departmental revenue, fees, etc.—			
Education .....	433	569	660
Health .....	3 998	4 419	4 945
Law and order .....	5 410	6 262	7 417
Tourism .....	1 269	1 507	1 511
Other (e) .....	r 19 071	20 499	30 533
Total .....	r 30 181	33 256	45 066
Grand total .....	620 307	683 231	764 990
Percentage increase .....	10.7	10.1	12.0

(a) Includes receipts under the Medibank agreement: 1980-81, \$42 604 000.

(b) Includes public hospital running cost grants: 1981-82, \$42 361 000; 1982-83, \$45 253 000.

(c) Mainly on advances made to semi-government authorities.

(d) See later section 'State Taxation'.

(e) Includes transfers from the Loan Fund and the State Highways Trust Fund relating to the Department of Main Roads and Construction.

(b) Includes motor vehicle registration fees, drivers' licences, charges for number plates, transfer of ownership fees and learners' permits.

Not all State taxation is paid into the Consolidated Revenue Fund, as shown in the following table:

State Taxation Collections Paid to Special Funds, Tasmania  
(\$'000)

Particulars	1980-81	1981-82	1982-83
Motor taxation—			
Retained by Transport Commission .....	120	135	130
Paid to the State Highways Trust Fund .....	302	388	430
Racing taxation—			
Paid to racing clubs and Racing Commission .....	1 373	1 404	1 295
Total .....	1 795	1 927	1 855

### Debt Charge Recoveries

After Federal Government grants and State taxation, debt charge recoveries is the next largest receipt item in Consolidated Revenue. The next table shows details of the interest and sinking fund payments made by various authorities on advances which have been made to them by the State Government. These advances have been made primarily from State loan borrowings and the Government attempts to recover amounts roughly equal to its liability for debt charges.

Debt Charge Recoveries: Consolidated Revenue Fund, Tasmania  
(\$'000)

Source of recovery	Interest			Sinking fund contributions		
	1980-81	1981-82	1982-83	1980-81	1981-82	1982-83
Agricultural Bank .....	1 862	2 032	2 294	—	—	—
Herd Improvement Board .....	49	61	88	5	13	7
Forestry Department .....	1 650	1 956	9 778	—	—	—
Government Printing Office .....	31	21	27	3	3	3
Housing Department .....	2 747	3 267	7 392	361	405	462
Hydro-Electric Commission .....	41 154	45 479	51 019	4 866	4 970	5 195
King Island Abattoirs Board .....	41	44	35	5	5	5
Loans to industry—						
Iron ore (Savage River agreement) .....	121	108	94	—	—	—
Other .....	1 072	1 115	1 002	—	—	—
Metropolitan Transport Trust .....	337	365	395	40	40	40
Metropolitan Water Board .....	1 347	1 464	1 619	171	170	170
Rivers and Water Supply Commission ...	402	500	636	54	53	52
Tasmanian Grain Elevators Board .....	108	129	142	17	17	17
Tourism Development .....	465	510	567	—	—	—
Transport Department .....	810	822	945	71	72	73
North-West Regional Water Authority .....	551	762	908	55	74	92
Marine Board of King Island .....	94	94	94	—	—	—
Midway Point Improvement Act 1975 .....	240	215	—	—	—	—
Public Bodies Assistance 1971 .....	237	303	320	—	—	—
Other .....	2 380	4 021	224	4	6	5
Total .....	55 697	63 268	77 579	5 651	5 829	6 122

### Public Debt Charges

A significant item of expenditure is public debt charges, but a high proportion is recovered from semi-government authorities. The next table shows the net burden on Consolidated Revenue Fund of debt charges:



**Public Debt Charges: Net Burden on Consolidated Revenue, Tasmania**  
(\$'000)

<i>Particulars</i>	<i>Interest</i>			<i>Sinking fund contribution</i>		
	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Expenditure from Consolidated Revenue .....	(a) 87 665	(a) 99 153	(a) 112 938	(b) 9 466	(b) 10 068	(b) 10 677
Recovered from semi-government bodies, etc. ....	55 697	63 268	77 579	5 651	5 829	6 122
Net burden on Consolidated Revenue (c) .....	31 968	35 885	35 359	3 815	4 239	4 555

(a) Includes loan management charges.

(b) Contribution payable under the Financial Agreement to the National Debt Sinking Fund.

(c) In respect of non-revenue producing assets such as schools, roads, etc.

### *Government Transport Services*

Unlike the Consolidated Revenue Funds of some Australian states, the Tasmanian Fund excludes the *gross* receipts and expenditure of State business undertakings such as shipping and bus services. The principal charge in 1982-83 under this item was in respect of the *net* loss incurred by the Transport Department during 1981-82 (\$4 289 001). Another major item was a contribution of \$9 755 000 to the Metropolitan Transport Trust which experienced a net trading loss of \$7 822 582 in 1982-83.

### *Roads and Bridges*

The chief expenditure under this item in 1982-83 was a transfer of \$26 967 936 to the State Highways Trust Fund, representing revenue received from motor tax and public vehicles fees. Grants totalling \$2 592 000 were paid from Consolidated Revenue Fund to the Transport Commission to cover the cost of vehicle registration and traffic control.

### **State Trust and Special Funds**

State revenues are payable to Consolidated Revenue with the exception of certain revenues which have been set aside by acts of Parliament for specific purposes and which are payable into special funds or accounts at the State Treasury. The volume of these transactions is high, \$586 137 662 being received in 1982-83, \$572 794 378 being expended and the balance in the funds changing from \$29 095 086 (1 July 1981) to \$42 438 370 (30 June 1983).

It should be noted that many accounts in the Trust and Special Funds indicate Treasury transactions which merely reiterate those recorded under Consolidated Revenue and Loan Funds; examples include, Income Tax Deductions Suspense Account, Tasmanian University (Commonwealth Grants) Account and Recurrent Grants to Non-Government Schools Account.

In the case of some accounts, there is provision for crediting the Trust and Special Funds with contributions from Consolidated Revenue, an important example being the State Highways Trust Fund:

**State Trust and Special Funds: State Highways Trust Fund, Tasmania, 1982-83**  
(\$'000)

<i>Item</i>	<i>Receipts</i>	<i>Expenditure</i>
Federal Government contribution .....	35 526	—
Grants from Consolidated Revenue .....	26 967	—
Miscellaneous receipts and refunds .....	1 552	64 261
Self-balancing entries .....	10 551	10 119
Fund entries .....	74 596	74 380

### State Loan Fund

Expenditure from the Loan Fund is devoted to two main purposes: (i) the making of advances to State semi-government authorities; and (ii) the carrying out of the State's own works program. Such funds, whether lent to other authorities for their works programs or spent directly by the State, result in the creation of new capital assets, a large proportion of which are revenue earning and therefore capable of reimbursing the State for the debt charges which it has incurred. (An earlier section on Consolidated Revenue expenditure shows the gross and net expenditure on annual debt charges.) In addition, conversion of existing loans is effected from the Loan Fund, but the amounts involved have been excluded from the next two tables as these transactions only alter the rates, sources or terms of existing public debt.

In addition to money from loan raisings, the Loan Fund may record other receipts such as the repayment of advances which had been made from the Fund to some Government authorities and community organisations, and contributions to capital works by the Federal Government.

Receipts into the Loan Fund are shown in the following table:

State Loan Fund: Receipts, Tasmania  
(\$'000)

Particulars	1980-81	1981-82	1982-83
Loans raised for new capital purposes .....	61 080	61 080	54 071
Loans raised for redemption and conversion (a) .....	189 048	159 352	225 956
Non-specific grants from Federal Government .....	30 539	30 539	32 076
Total .....	280 667	250 971	312 103
Specific grants from Federal Government—			
Education .....	8 160	7 238	2 144
Health and mental health .....	5 028	3 125	7 589
Urban public transport .....	1 178	72	110
Other .....	1 629	1 534	1 567
Total .....	15 994	11 969	11 410
Payments from State sources (b)—			
Hydro-Electric Commission Act .....	—	—	15 000
Apple and Pear Marketing Act 1977 .....	200	1 000	—
Industrial Development Act .....	1 664	1 837	1 308
Transport Act .....	76	67	32
State Advances Act .....	1 266	1 197	889
Homes Act .....	90	596	630
Tourist accommodation and facilities loans .....	376	182	363
Sale of Government properties .....	450	501	44
Other .....	4 095	4 480	7 790
Total .....	8 217	9 860	26 056
Total Loan Fund receipts .....	304 878	272 801	349 567

(a) For the redemption and conversion of existing loans.

(b) Payments and repayments under provisions of various State Acts.

The following table shows annual gross and net loan expenditure. The net loan expenditure for 1982-83 (\$54.1m) was 60.1 per cent less than for 1981-82.

**Loan Fund: Gross and Net Loan Expenditure, Tasmania**  
(S'000)

Year	Loan expenditure		Year	Loan expenditure	
	Gross	Net		Gross	Net
1977-78 .....	123 647	104 920	1980-81 .....	116 005	91 793
1978-79 .....	122 544	99 167	1981-82 .....	106 830	135 557
1979-80 .....	121 979	92 387	1982-83 .....	61 080	54 071

Traditionally, loan expenditure has been recorded on both gross and net bases. The annual net loan expenditure is equal to the disbursement of borrowings during the year for new capital purposes (as distinct from borrowings for the conversion of existing debt), plus capital contributions by the Federal Government, augmented or diminished by the net movement in the Loan Fund balance. The following table shows the calculation of net loan expenditure from two viewpoints: (i) as a residue from gross loan expenditure; and (ii) as the algebraic sum of new loan raisings for new capital purposes, the net movement in the Loan Fund balance and discount and capital appreciation expenses.

**State Loan Fund: Calculation of Net Loan Expenditure, Tasmania**  
(S'000)

Particulars	1980-81	1981-82	1982-83
(i) Gross loan expenditure .....	116 005	106 830	135 557
Less Repayments .....	8 217	9 860	26 056
Less Federal Government specific grants .....	15 994	11 969	11 410
Net loan expenditure .....	91 793	85 001	98 091
(ii) Gross borrowings for new capital purposes .....	61 080	61 080	54 071
Federal Government non-specific grant .....	30 539	30 539	32 076
Movement in Loan Fund balance (a) .....	-1 041	-9 013	+8 232
Transfer from Consolidated Revenue Fund .....	—	—	—
Transfer from Accumulated Revenue Account ..	—	—	—
Other (b) .....	1 215	2 395	3 710
Net loan expenditure .....	91 793	85 001	98 091

(a) Negative sign (—) indicates an increase from opening to closing balance, plus sign (+) indicates a decrease.

(b) Discount on borrowings for conversion and re-financing purposes and capital appreciation items.

The *Public Account Act* 1962 has, amongst other things, the following provisions relating to the Loan Fund: (i) the Governor, on Treasury advice, may make transfers between block votes as long as the total authorised amount is not exceeded; (ii) a sum of up to \$400 000 may be spent for purposes not previously authorised; (iii) for purposes previously authorised, an additional sum of up to \$1m may be spent; (iv) in instances of expenditure outside the provisions of a specific Loan Fund Appropriation Act, the ratification of such action must be sought from Parliament before the close of the following financial year. The Act also provides for the unexpended balances of votes at the close of the financial year to lapse.

**State Public Debt**

Prior to 1 July 1975, the State public debt was calculated on two bases: (i) with overseas debt calculated at 'mint par of exchange' i.e. at the exchange rates prevailing on 1 July 1927; and (ii) with overseas debt calculated at current rates of exchange. 'Mint

par debt' was the official debt for the purpose of determining sinking fund contributions payable under the Financial Agreement, 1927. This Agreement was amended at the end of June 1975 and a new formula was applied for determining sinking fund contributions. 'Mint par debt' is no longer used in the calculations.

The following table shows the State Public Debt at current rates of exchange:

State Public Debt at 30 June 1983: At Current Rate of Exchange, Tasmania

Place in which debt repayable	Amount in currency in which raised		\$ Aust. at current rates of exchange	
	Currency	Debt ( '\$000 )	Conversion rate of \$A (a)	Debt ( '\$A'000 )
Australia .....	\$A	1 113 548	—	1 113 548
London .....	£ sterling	69	£ stg 0.5717	121
New York .....	US\$	636	US\$ 0.8731	728
Total .....				1 114 397

(a) Exchange rates at 30 June 1983 for \$A1.

The growth of the public debt, expressed at current rates of exchange (as at 30 June for year shown), is shown in the following table:

State Public Debt: Place of Flotation and Interest Payable, Tasmania  
(\$'000)

At 30 June	Debt redeemable in—					Total Debt	Interest payable
	London	New York	Canada	Nether- lands	Australia		
1978 .....	1 977	2 439	449	252	864 980	870 097	68 233
1979 .....	1 234	1 895	389	213	918 827	922 559	73 604
1980 .....	1 295	1 410	364	145	966 735	969 948	80 205
1981 .....	1 080	1 119	—	53	1 018 553	1 020 804	91 494
1982 .....	117	940	—	—	1 070 548	1 071 606	105 333
1983 .....	121	728	—	—	1 113 548	1 114 397	116 405

A notable feature of the State Public Debt is that approximately 99 per cent of indebtedness is now domiciled in Australia. There has been a gradual change from the situation which existed a century ago when nearly all loans were financed in London.

#### Public Debt Transactions

Securities in the form of bonds, inscribed stock and debentures are issued by the Commonwealth for and on behalf of Tasmania. Under the Financial Agreement of 1927, redemption and conversion of loans is carried out by the National Debt Sinking Fund Commission.

With the amendment, in 1975, to the Agreement of 1927, a new base for the provision of Sinking Funds by the States was established. The agreement, which is to continue until 1985, provided for a base payment by Tasmania of \$7m per annum. For the period until 1985 Tasmania's contribution to the Sinking Fund is to be increased or reduced by 1.2 per cent per annum of the amount by which the public debt thereafter is increased or diminished.

The following table shows particulars of loans raised and redeemed annually during the most recent four-year period expressed at current rates of exchange. It will be observed that redemption of loans falling due in any particular year is achieved, in the main, by conversion (i.e. by renewal of the original loans on new terms and conditions).

**State Public Debt: Conversion and Redemption at Current Rates of Exchange, Tasmania**  
(\\$'000)

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Loans raised for—				
New capital purposes .....	58 267	61 579	62 278	54 982
Conversion purposes .....	4 130	960	960	1 900
Redemption of maturing loans .....	58 401	188 804	160 342	229 668
Total raisings .....	120 798	251 343	223 580	286 550
Less Loans redeemed—				
By conversion .....	4 130	960	960	1 900
From new cash raisings .....	58 324	187 737	159 146	225 956
From National Debt Sinking Fund (a) .....	10 954	11 790	12 672	15 903
Net increase in public debt .....	47 389	50 856	50 802	42 791
Debt at end of year .....	969 948	1 020 804	1 071 606	1 114 397

(a) Includes a balancing item due to fluctuation in exchange rates during the year, the actual redemption being \$10 964 000 in 1979-80, \$11 540 000 in 1980-81, \$12 784 000 in 1981-82 and \$15 118 000 in 1982-83.

The next table summarises the transactions of the National Debt Commission in relation to the Tasmanian Public Debt:

**National Debt Commission Transactions in Respect of Tasmanian Public Debt**  
(\\$'000)

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Balance at beginning of period .....	457	970	1 587	1 702
Contributions—				
From— Federal Government .....	2 544	2 675	2 816	2 958
State Government .....	8 903	9 466	10 069	10 677
Interest received (net) .....	29	16	14	15
Funds available .....	11 934	13 127	14 487	15 353
Less redemption and re-purchase at current rates of exchange .....	10 964	11 540	12 784	15 118
Balance at end of period .....	970	1 587	1 702	235

The National Debt Commission was established as part of the 1927 Financial Agreement and its function is to administer a single consolidated sinking fund in respect of the debt of the Federal and State Governments. (The obligations of the States and the Federal Government in contributing to the consolidated sinking fund are set out earlier in this chapter in a section headed 'Payments Under the Financial Agreement (1927)').

## STATE TAXATION

In the section on the Consolidated Revenue Fund, taxes collected by the Tasmanian Government are shown in summarised form.

The next table gives full details of State taxation. It should be noted that certain taxes are reserved for special purposes. Examples are: (i) motor taxation—the 'motor tax' and 'public vehicle fees' components of this item are passed from Consolidated Revenue to the State Highways Trust Fund; and (ii) racing and gaming taxes—all racing and gaming taxes paid to special funds are passed to the racing clubs.

**State Taxation Collections, Tasmania (a)**  
(*\$'000*)

<i>Tax</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Deceased persons' estates duties .....	3 030	3 288	2 600
Stamp duties (excluding bookmakers' tickets)—			
Cheques .....	1 691	2 435	2 538
Hire purchase and related agreements .....	2 924	3 164	2 455
Loan Duty .....	1 777	2 954	684
Legal documents, etc. ....	9 443	8 968	9 362
Adhesive revenue stamps .....	375	483	453
Insurances .....	4 424	5 653	5 536
Marketable securities .....	370	416	268
Land tax .....	6 110	6 410	7 991
Motor taxation—			
Paid to—Consolidated Revenue .....	29 313	33 613	32 704
Special funds .....	422	523	560
Levy paid to fire authorities ( <i>b</i> ) .....	5 825	5 296	7 600
Liquor tax and related licences ( <i>c</i> ) .....	5 325	5 759	6 067
Racing and gaming taxes—			
Paid to—Consolidated Revenue .....	3 529	4 084	3 984
Adjustment ( <i>d</i> ) .....	+76	—	—
Special funds .....	1 373	1 404	1 295
Pay-roll tax .....	52 056	56 207	55 909
Hydro-Electric Commission statutory levy .....	3 705	4 621	5 185
Casino tax and licence fees .....	2 978	3 106	3 318
Soccer football pools tax .....	355	265	648
Business franchise—Petroleum tax .....	—	4 334	10 930
Tobacco tax .....	1 796	4 453	5 173
Other sundry licences .....	15	17	17
<b>Total .....</b>	<b>136 912</b>	<b>157 453</b>	<b>165 277</b>
<b>Percentage increase .....</b>	<b>14.6</b>	<b>15.0</b>	<b>5.0</b>

(a) Collections from all sources of taxation, including amounts paid to special funds.

(b) Paid by insurance companies direct to the Fire Brigades Commission and the Rural Fires Board until 31 October 1979. As from 1 November the amount was paid to the State Fire Commission.

(c) See later section 'Fees and Licences under the Licensing Act' for details.

(d) For different accounting periods.

### *State Land Tax*

The Government announced in the 1982 Budget that land tax on principal residence and rural land was to be re-introduced. Legislation to give effect to the decision was the *Land and Income Taxation Amendment Act* (No. 78 of 1982) and the *Land Tax Act* (No. 77 of 1982). The latter Act fixed the land tax rate scales for each of the categories general, rural and principal residence land. The principal residence scale provided for minimum tax of \$10 and maximum tax of \$150 on properties valued in excess of \$50 000. The scale in respect to rural land provided for minimum tax of \$25 and maximum tax of \$150 on properties with land values equal to or exceeding \$100 000. The general scale of land tax in respect of which minimum tax of \$10 applied was virtually identical to the schedule of rates which applied in the previous year.

Eleven municipalities were revalued with effect from 1 July 1982. These were the municipalities of Bothwell, Campbell Town, Devonport, Evandale, George Town, Hamilton, Kingborough, Ross, Scottsdale, Sorell and Wynyard. Total land value increased by \$274 998 962 as a consequence of the quinquennial revaluations. Increases in valuations for the remaining municipalities amounted to \$6 261 350 resulting in an overall increase for the State of \$281 260 312.

Total land tax assessed for 1982-83 increased by \$1 982 570 or 28.5 per cent to \$8 936 784. Of the total land tax assessed \$7 392 800 related to general land, \$860 928 to principal residence land and \$683 009 to rural land.



The table below details the number of taxpayers and tax payable by value range for each of the land tax categories:

**Land Tax Assessed 1982-83**  
(Source: Commissioner of Taxes, Report 1982-83.)

Value	Principal residence		Rural		General	
	Number	Tax	Number	Tax	Number	Tax
\$		\$		\$		\$
1— 5 000 .....	3 139	31 390	475	11 875	24 608	246 080
5 001— 10 000 .....	33 953	339 530	1 170	29 250	20 751	207 510
10 001— 15 000 .....	16 028	229 271	1 309	32 725	7 236	206 433
15 001— 25 000 .....	5 760	166 378	2 265	56 625	4 849	392 247
25 001— 50 000 .....	1 155	84 309	3 160	114 060	2 705	600 201
50 001— 75 000 .....	53	7 950	1 342	97 794	866	451 740
75 001—100 000 .....	11	1 650	757	94 230	376	328 416
100 001—125 000 .....	3	450	391	58 650	195	248 123
125 001—150 000 .....	—	—	309	46 350	134	235 447
150 001—200 000 .....	—	—	324	48 600	143	363 986
200 001—250 000 .....	—	—	178	26 700	71	266 008
250 001 and above .....	—	—	441	66 150	219	3 789 125
Clubs .....	—	—	—	—	26	57 534
Total .....	60 102	860 928	12 121	683 009	62 179	7 392 850

#### State Deceased Persons' Estate Duties

The legislation dealing with State deceased persons' estate duties is contained in the *Deceased Persons' Estates Duties Act 1931* (as amended).

Following the announcement in the 1982 Budget that the Government had decided to abolish all death duties, the *Deceased Persons' Estates Duties Amendment Act* (No. 49 of 1982) provided that duty would not be payable in respect to the estates of persons dying on or after 1 October 1982.

As a consequence of the lag in lodgment and assessment of affidavits, there was no noticeable impact on monthly assessments until some months after October. However, by the end of the year there had been a significant decline in the number of estates being lodged each month and the amount of duty assessed.

The following table gives details of assessments for 1982-83:

**State Deceased Person's Estate Duties**  
Number of Estates, Net Value and Tax Assessed, Tasmania, 1982-83

Grade of dutiable value	Estates		Net value as assessed	Total duty assessed (a)	Average duty per taxable estate
	Examined	Taxable			
	no.	no.	\$'000	\$'000	\$
1— 500 .....	19	—	2	—	—
501— 1 000 .....	4	—	3	—	—
1 001— 1 500 .....	1	—	1	—	—
1 501— 2 000 .....	4	1	7	—	—
2 001— 3 000 .....	5	—	13	—	—
3 001— 4 000 .....	7	—	24	—	—
4 001— 5 000 .....	13	6	61	1	169
5 001— 6 000 .....	6	—	33	—	—
6 001— 8 000 .....	12	6	129	1	180
8 001— 10 000 .....	24	5	216	1	175
10 001— 15 000 .....	55	19	664	11	564
15 001— 20 000 .....	69	22	940	29	1 298
20 001— 30 000 .....	144	54	3 525	107	1 985
30 001— 40 000 .....	112	42	3 877	144	3 432
40 001— 50 000 .....	77	33	3 494	174	5 279

**State Deceased Person's Estate Duties**  
**Number of Estates, Net Value and Tax Assessed, Tasmania, 1982-83**

Grade of dutiable value	Estates		Net value as assessed	Total duty assessed (a)	Average duty per taxable estate
	Examined	Taxable			
	no.	no.	\$'000	\$'000	\$
50 001—100 000 .....	136	43	9 286	522	12 128
100 001—150 000 .....	35	22	3 658	244	11 088
150 001—200 000 .....	28	22	3 503	419	19 041
200 001 and over .....	47	28	10 393	618	22 073
Adjustments .....	—	—	—	-82	..
<b>Total .....</b>	<b>798</b>	<b>303</b>	<b>39 829</b>	<b>2 188</b>	<b>..</b>

(a) Rates of duty and levels of exemption vary according to the class of beneficiary and the type of asset contained in the estate (details may be obtained from the Public Trustee).

### Motor Taxation

The chief components of motor taxation are: (i) motor tax assessed on a power-weight formula; (ii) vehicle registration fees; (iii) drivers' and riders' licences; and (iv) other registration fees mainly related to public vehicles.

Details of motor taxation collections are shown in the following table:

**State Motor Taxation, Tasmania**  
**(\$'000)**

Particulars	1980-81	1981-82	1982-83
Motor tax .....	17 729	18 746	17 021
Public vehicle fees (a) .....	760	285	240
Stamp duty on—Third party insurance .....	465	561	547
Vehicle registration .....	5 370	7 820	9 349
Other traffic fees (b) .....	5 109	6 336	5 677
<b>Total .....</b>	<b>29 433</b>	<b>33 748</b>	<b>32 834</b>
Paid into Consolidated Revenue Fund .....	29 313	34 136	32 704
Retained by Transport Commission .....	120	135	130

(a) Includes public vehicle fees retained by Transport Commission.

(b) Includes registration fees, licences, number plate charges, transfer fees and learners' permits.

'Motor tax' plus most of the item 'public vehicle fees' shown in the above table are paid to the State Highways Trust Fund.

### Fees and Licences under the Licensing Act

The State raises revenue from hotels, clubs, restaurants and liquor wholesalers by: (i) licensing; and (ii) imposing 'percentage fees' based on turnover for the year *preceding* collection.

**Fees and Related Licences Collected Under the Licensing Act, Tasmania**  
**(\$'000)**

Fees	1980-81	1981-82	1982-83
Percentage fees (a)—			
General, club, on-licences .....	4 394	4 801	5 096
Off-licences .....	896	921	932
Other fees .....	35	37	39
<b>Total .....</b>	<b>5 325</b>	<b>5 759</b>	<b>6 067</b>

(a) Based on liquor purchases by hotels and direct sales by wholesalers to the public.

### Gambling Taxation

The following table shows gambling turnover for recent years:

Turnover from the Major Forms of Legal Gambling, Tasmania  
(Source: Tasmanian Racing and Gaming Commission)  
(\$ million)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Racing—						
TAB .....	38.6	41.8	46.7	55.7	61.8	62.1
On-course tote .....	2.3	2.2	2.5	4.2	5.4	6.1
Bookmakers .....	47.5	47.3	49.0	55.0	48.9	41.7
Total racing turnover .....	88.4	91.3	98.2	114.9	116.1	109.9
Casino .....	44.0	50.6	56.0	59.0	68.0	89.3
Tattersalls & Tattslotto .....	11.0	16.9	22.2	25.3	35.1	34.5
Soccerpools .....	0.9	1.0	1.3	1.1	0.9	2.0
Minor gambling (a) .....	7.0	11.7	16.8	18.1	17.1	14.7
Total gambling turnover .....	n.a.	171.5	194.5	218.4	237.2	250.7

(a) Lucky envelopes, bingo, punch boards, and includes estimates only for raffles and calcuttas.

**Racing Taxation:** Amendments to the *Racing and Gaming Act* in 1974 established the Totalisator Agency Board from January 1975, operating both on and off course totalisator betting, and restricted the operations of licensed bookmakers to on-course betting only. (For further details on the rates of taxation on racing, see the 1977 *Year Book*.)

**State Taxation on Lotteries:** From 1942 (when the Federal Government became the sole collector of income tax), lotteries conducted from Hobart by Tattersalls (George Adams Estate) were Tasmania's chief source of revenue through State taxation. On 14 July 1954, the promoters transferred their operations to Victoria. A new organisation—Tasmanian Lotteries—was granted a licence and operated until 30 September 1961, when the proprietor surrendered the licence. No operator is now licensed.

In September 1960, the *Racing and Gaming Act* 1952 was amended to permit agreements with other States for the sale of their lottery tickets in Tasmania. Under an agreement with the Victorian Government, Tattersalls was allowed to sell tickets through accredited Tasmanian representatives; the Victorian Government was to pay quarterly to the Tasmanian Government 15½ per cent of the value of subscriptions made as a result of this concession. The duty payable was increased to 16¼ per cent from 1 January 1979.

**Casino Tax and Licence Fees:** The rate of casino tax and the licence fee were established by an agreement made in September 1968 between the State Treasurer, Federal Hotels Ltd and Australian National Hotels Ltd. The agreement was ratified by the *Wrest Point Casino Licence and Development Act* 1968. The casino tax is calculated according to a graduated scale based upon monthly gross profit and is payable monthly. Initially, rates ranged from five per cent of gross profit where that profit was less than \$25 000 for the month to 30 per cent where the gross profit exceeded \$125 000. The licence fee was fixed at \$2 500 per month.

Early in 1975 the State Government received a submission from Australian National Hotels Ltd for changes in the tax scale. As a result, the effective maximum rate of tax was reduced to 25 per cent. This reduction was effected, from 1 June 1975 to 30 November 1976, by the remission of one sixth of the tax paid through an appropriation from Consolidated Revenue. An amendment to the Act passed in November 1976 reduced the actual maximum rate of tax to 25 per cent. In this chapter, taxation receipts have been recorded *net* of the remission of casino tax and, consequently, total receipts and expenditure for Consolidated Revenue are slightly less than the totals recorded by the State Treasurer.

Details of casino taxation collections are shown in the following table:

**Casino Tax and Licence Fees, Tasmania**  
(\$'000)

<i>Particulars</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Casino tax .....	2 948	3 069	3 201
Licence fee .....	30	37	117
Total .....	2 978	3 106	3 318

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## CHAPTER 5

### LOCAL GOVERNMENT

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## Chapter 5

### LOCAL GOVERNMENT

#### HISTORICAL

#### Structure

##### *Introduction*

In Tasmania, the functions of local government are more restricted than in some other countries as the State Government takes direct responsibility for important services such as the police, education, housing, public transport, etc. This peculiarity is not confined to Tasmania and is encountered in the other Australian states, where central control is exercised over functions often delegated to local government authorities in overseas countries. The origin of this tendency probably lies in early colonial history when the continent was virtually empty but the apparatus of government existed at each of the new coastal settlements (Sydney, Hobart, Perth, Melbourne, Adelaide and Brisbane, in order of age). In the Australian situation strong central administrations came first. Local government was a much later growth, the initiative for its creation often coming from the central administration itself in the respective colonies.

The first division of Tasmania into local administrative districts occurred in 1827 when the Colony was split into nine police districts; each district was under the control of a magistrate whose functions were primarily disciplinary and connected with administering the convict system. From then, the development of local government in Tasmania followed three distinct phases as outlined below.

##### *Tasmanian Cities*

From 1835 to 1857 several acts were passed relating to the local government of Hobart and Launceston—Hobart Town was granted elected commissioners in 1846, and under an Act of 1852, both Hobart and Launceston were given elected municipal councils. In 1857 the City of Hobart was incorporated as was the Town of Launceston one year later. Launceston was proclaimed a city in 1888. For the next 76 years these were the only two cities in the State. In 1964 Glenorchy was granted city status and in 1981 Devonport was also proclaimed a city.

The form of local government in Hobart and Launceston is governed by separate Corporation Acts for each authority; in the cases of Glenorchy and Devonport, however, their operation as cities is provided for in the *Local Government Act 1962*.

##### *Rest of State before 1906*

The first step towards the creation of rural municipalities came with the *Rural Municipalities Act 1858*. Between 1860 and 1863, 16 municipalities had been proclaimed but the nine police districts were also retained under magisterial control. The Act of 1858 was repealed in 1865 and a new *Rural Municipalities Act* became law. The State was then divided into thirty municipal districts with defined boundaries. However, only 19 of these actually had councils. One more district was added in 1880. The City of Hobart and the Town of Launceston were exempted from the Act.

By 1906 there were, in addition to the city councils for Hobart and Launceston and the municipal district councils, many boards and trusts in Tasmania created for specific local government purposes. These had been formed in respect of water, drainage, roads,



rabbits, health, fruit, recreation grounds, schools, works and other matters. There were in existence 105 road trusts, 19 rural municipalities, 23 town boards and 2 city councils; a total of 149 local authorities.

#### *Rest of State after 1906*

The *Local Government Act* 1906 abolished all rural municipalities, town boards, water trusts, main road districts, etc. and replaced them with municipalities which took over the administration of all the local government functions previously administered by the numerous local bodies. Section 10 of the Act provided that a commission should divide the State into not more than 60 districts to be later proclaimed municipalities. The commission reported in 1907 and recommended that the State be divided into 50 municipalities. These did not include the cities of Hobart and Launceston which were governed respectively by the *Hobart Corporation Act* 1893 and the *Launceston Corporation Act* 1894. The above recommendations were carried into effect by proclamation of the 50 municipalities. Subsequently, three of the municipalities were amalgamated — Queenborough and New Town with Hobart, and Invermay with Launceston. Glenorchy became a city in 1964 and Devonport in 1981. Hence there are 45 municipalities and four cities in existence at the present time. Apart from the enlargement of Hobart and Launceston caused by the above amalgamations, the boundaries are still substantially the same as those proclaimed in 1907, although there have been numerous relatively minor boundary changes since then.

#### **Inquiries into Local Government**

Rationalisation of Tasmania's 49 local government authorities has been a contentious issue for more than 40 years. Beginning with a Royal Commission in 1938, six inquiries (Royal Commission 1938, Select Committee 1960, Municipal Commission 1962, Municipal Commission 1972, Board of Inquiry 1978 and Select Committee 1982) have been established to consider the desirability of amalgamating some municipalities. (For details see earlier editions of the *Year Book*.)

#### *Select Committee 1982*

Following recommendations of the Board of Inquiry 1978, legislation to amalgamate the eight municipalities of the Tamar Valley was introduced into and passed by the House of Assembly in 1982, but failed to pass the Legislative Council. The Council established a Select Committee on the Local Government Reorganisation (Tamar Valley) Bill 1981 to inquire into and report upon:

- (i) 'The need for and the desirability of rationalising local government in the Tamar region;
- (ii) How best to give effect to any rationalisation recommendations;
- (iii) The effect that any rationalisation of local government in the Tamar region could be expected to have on local government in any other area of Tasmania;
- (iv) Whether a cost benefit study may be a necessary and practical requirement before implementing rationalisation recommendations;
- (v) Whether a poll of electors is both desirable and practical before implementing rationalisation recommendations;
- (vi) Any other matters arising from the above and incidental thereto.'

The Committee recommended:

- (i) That a new City of Launceston be established comprising all of the City of Launceston and the urban areas of Beaconsfield, Evandale, Lilydale, St Leonards and Westbury municipalities;
- (ii) That the new City of Launceston be divided into five wards from each of which 3 aldermen would be elected;
- (iii) That the Mayor and Deputy Mayor be elected by the electors;
- (iv) That a poll be conducted on the proposed amalgamation to provide guidelines to the Government and that such a poll be compulsory for all adults living in the municipalities directly affected.

A poll was held on 17 December 1983, which although accepted by an overall majority of voters, was rejected by a majority of voters of all municipalities except for the City of Launceston. (For further details see the special article *The Local Government Reorganisation (Tamar Valley) Poll 1983*, at the end of this chapter.)

## LOCAL GOVERNMENT—PRESENT ORGANISATION

### *Authority and Functions*

The authority for, and the forms of, local government are prescribed entirely by State legislation which has largely been consolidated in the *Local Government Act* 1962. Hobart and Launceston cities operate under separate corporation Acts but the other authorities, including the cities of Glenorchy and Devonport, operate under the Act of 1962.

The functions of the municipalities are set out in broad general terms in Section 176 of the *Local Government Act* as:

'A Municipality: (a) may for the welfare and good government of its district and the inhabitants thereof: (i) make by-laws; (ii) undertake, make and maintain works, buildings and services; and (iii) order and dispose the common affairs of its members; and (b) shall cause the Queen's peace to be kept and maintained within its districts.'

Particular authority is given by Section 180 for a council clerk to be a deputy clerk of the peace, registrar of the court of general sessions and clerk of petty sessions in his municipality.

In addition, by certain Acts, the municipalities are given specific responsibilities, e.g. *Health Act*, *Local Courts Act*, etc.

### *Electors*

Persons eligible to vote in local government elections must be either: (i) an owner or occupier of rateable land who is a British subject over the age of 18 years; or (ii) a person who has lived in a municipality for a period of at least six months and is enrolled as an elector for the Legislative Council or House of Assembly in respect of a division or subdivision that includes whole or part of the municipality.

In 1972 the *Local Government Act* 1962 was amended and plural voting abolished; an elector may now exercise, at the most, three votes—one in his own right and two on behalf of other persons.

In no Australian state are unnaturalised aliens, who are owner-occupiers, eligible to vote at local government elections; Tasmania is the only State with a provision for aliens to have another person vote on their behalf.

### *Councillors*

A councillor must be an elector of, and either reside, or carry on business, in the municipality and is subject to disqualification for certain breaches of conduct. The term of office is three years and one-third of the council retires each year. Councils may comprise six, nine, 12 or 15 councillors. The warden, deputy warden and treasurer are elected by the council members on an annual basis. The electors of the City of Hobart elect the Lord Mayor and in Glenorchy and Devonport the electors elect the Mayor. However, the Mayor of Launceston is elected by council members. The office of warden is comparable with that of the mayor of a city or the president of a shire in other states.

### *Government Intervention*

For any of a number of reasons, the Minister administering the *Local Government Act* may consider it necessary to recommend suspension of the elected councillors and the appointment of a commission, or in certain cases an administrator, to carry on municipal government in a particular municipality.

### *Cities, Municipalities and Towns*

In Tasmania there are only two categories of local government; a municipality or

a city. The Act provides for the establishment of towns and indicates requirements before such towns are proclaimed but these are not municipal administrative units. Generally an area is proclaimed as a town to bring into action certain provisions relating to rating and building requirements. Before a municipality can petition for a town or municipal area to become a city, it must have had, for five years before the petition, an average population of not less than 20 000.

Other than this population requirement for a city there are no provisions, such as exist in some of the other states, for enlarging or diminishing the status of municipalities to accord with increasing or decreasing population.

### Area of Municipalities and Cities

In the table that follows, the measured areas of local government areas have been rounded to the nearest 10 square kilometres and the area of Tasmania has been rounded to the nearest 100 square kilometres as the accuracy of more detailed measurement is difficult to determine. Where municipal boundaries lie in the sea or an estuary these legal limits have been disregarded so that the stated area relates to a physical boundary (i.e. the coastline). However, the areas shown include all smaller islands which form part of the State.

Area of Local Government Areas, Statistical Divisions, and Sub-divisions (a)  
(Square Kilometres)

<i>Local government area (statistical division and sub-division in bold type)</i>	<i>Area</i>	<i>Local government area (statistical division and sub-division in bold type)</i>	<i>Area</i>
Hobart (b) (H) .....	(c)80	Campbell Town .....	1 440
Glenorchy (b) (H) .....	(c)120	Fingal .....	2 730
Clarence (H) .....	250	Flinders .....	1 990
Brighton (H) (S) .....	440	Portland .....	1 580
Kingborough (H) (S) .....	350	Ringarooma .....	1 630
New Norfolk (H) (S) .....	1 320	Ross .....	1 240
Sorell (H) (S) .....	780	Scottsdale .....	1 290
Bothwell (S) .....	2 610	<b>North Eastern .....</b>	<b>11 900</b>
Bruny (S) .....	360		
Esperance (S) .....	6 190	<b>NORTHERN .....</b>	<b>20 610</b>
Glamorgan (S) .....	1 540		
Green Ponds (S) .....	420	Burnie .....	620
Hamilton (S) .....	5 850	Circular Head .....	4 920
Huon (S) .....	770	Devonport (b) .....	120
Oatlands (S) .....	1 540	Kentish .....	1 190
Port Cygnet (S) .....	240	King Island .....	1 100
Richmond (S) .....	570	Latrobe .....	550
Spring Bay (S) .....	1 120	Penguin .....	430
Tasman (S) .....	480	Ulverstone .....	510
<b>HOBART .....</b>	<b>940</b>	Wynyard .....	810
<b>SOUTHERN .....</b>	<b>24 090</b>	<b>North Western .....</b>	<b>10 240</b>
Launceston (b) .....	(c)28	Gormanston .....	2 870
Beaconsfield .....	640	Queenstown .....	140
Deloraine .....	2 920	Strahan .....	3 730
Evandale .....	990	Waratah .....	2 710
George Town .....	650	Zeehan .....	3 000
Lilydale .....	680	<b>Western .....</b>	<b>12 460</b>
Longford .....	1 000		
St Leonards .....	890	<b>MERSEY-LYELL .....</b>	<b>22 700</b>
Westbury .....	900		
<b>Tamar .....</b>	<b>8 700</b>	<b>TASMANIA .....</b>	<b>68 300</b>

(a) See Chapter 2 for a description of Divisions and Sub-divisions. (b) City.

(c) To nearest square kilometre.

At the 1966 Population Census, new definitions based on high population density were employed to fix the boundaries of urban areas. The two major centres in the State at the 1971 Population Census, with boundaries conforming to the definitions, were: (i) Urban Hobart (approximately 112 square kilometres); and (ii) Urban Launceston (approximately 74 square kilometres). (See Chapter 6 for definitions of these areas.)

### *Population*

The estimated resident population of Tasmania's local government areas at 30 June 1983 ranged from as low as 110 in Gormanston Municipality to a high of 47 590 for the City of Hobart. Of the 49 local government areas in the State, seven had populations of under 1 000 (see Chapter 6, Demography, for further details).

## FINANCE

### Introduction

For local government purposes Tasmania is divided into 49 areas, comprising 45 municipalities and the cities of Hobart, Launceston, Glenorchy and Devonport. There are no unincorporated areas.

The term 'local government' is employed only in relation to the municipalities and city corporations. Details of semi-government authorities concerned with water supply appear in a later section of this chapter; such authorities provide bulk water but reticulation and sale to householders remain local government functions. Since 1961 the Metropolitan Water Board has incurred loan debts which, under earlier arrangements, would have been entered as the water loan debts of Hobart, Glenorchy, Clarence and Kingborough local government authorities. A similar situation exists on the North-West Coast. The North-West Regional Water Authority undertakes functions similar to those of the Metropolitan Water Board in relation to the local government authorities of Circular Head, Wynyard, Penguin, Ulverstone, Devonport, Latrobe and Kentish. Burnie has not joined the regional water supply scheme.

Local government finance statistics in Tasmania are compiled by the Australian Bureau of Statistics from annual local government accounts. Under section 329 of the *Local Government Act* 1962 each local government authority has to submit its accounts annually to the Auditor-General. Copies of these accounts are also made available to the ABS.

During 1979-80 the ABS introduced a System of Standardised Local Government Finance Statistics (SLGFS) to enable the production of uniform statistics for all local government authorities in Australia. Owing to changes in definitions of items due to the introduction of the SLGFS, the following financial statistics are not comparable with those in issues of the *Year Book* prior to 1981.

### Ordinary Services

#### *Revenue and Loan Receipt*

The largest proportion of local government revenue comes from rates (50.6 per cent in 1981-82) which are direct charges on owners of property. After rates, the next most important sources of revenue are: (i) government and semi-government grants; (ii) charges for public works and services; and (iii) loan raisings. The following table shows the revenue and loan receipts of the Tasmanian municipalities and cities for 1981-82.

**Local Government Authorities, Tasmania**  
**Ordinary Services—Revenue and Loan Receipts, 1981-82**  
**(\$'000)**

<i>Category</i>	<i>Amount</i>	<i>Per cent of total</i>
<b>Revenue</b>		
Rates (including penalties) .....	43 682	47.3
Licences, fees and fines .....	1 630	1.8
Charges .....	10 416	11.3
Interest received .....	6 182	6.7
Transfers from trading activities .....	124	0.1
Government grants—General purpose .....	11 227	12.2
Specific: capital .....	5 396	5.8
Specific: current .....	3 464	3.8
Other revenue .....	4 199	4.6
<b>Total revenue</b> .....	<b>86 320</b>	<b>93.5</b>
<b>Loan Receipts</b>		
From—Commonwealth and State Governments .....	276	0.3
Other lenders .....	5 770	6.3
<b>Total loan receipts</b> .....	<b>6 046</b>	<b>6.6</b>
<b>Total revenue and loan receipts</b> .....	<b>92 365</b>	<b>100.0</b>

### *Outlay*

The following table summarises the outlay of the Tasmanian municipalities and cities for 1981-82:

**Local Government Authorities, Tasmania**  
**Ordinary Services—Outlay (a), 1981-82**  
**(\$'000)**

<i>Category</i>	<i>Amount</i>
<b>Outlay on goods, services and land</b>	
Capital—Land and fixed assets .....	24 286
Current .....	53 113
<b>Total outlay on goods, services and land</b> .....	<b>77 399</b>
Debt charges—Interest paid .....	8 369
Debt redemption .....	5 401
Levies paid to Governments .....	1 895
Donations paid .....	131
Other (b) .....	299
<b>Total outlay</b> .....	<b>93 495</b>

(a) Comprises outlay from revenue and loans.

(b) Advances to public and transfers to trading activities.

The following table shows the outlay on goods, services and land classified by purpose category of expenditure and whether capital or current:

**Local Government Authorities, Tasmania**  
**Ordinary Services Outlay on Goods, Services and Land**  
**by Purpose (a), 1981-82**  
**(\$'000)**

Category	Outlay		
	Current	Capital	Total
General administration .....	15 609	1 550	17 159
Law, order and public safety .....	459	91	550
Education, health, welfare and housing .....	1 908	516	2 424
Protection of the environment .....	3 955	1 535	5 490
Community and regional development .....	555	83	637
Other community amenities .....	656	504	1 160
Public halls and civic centres .....	1 354	885	2 239
Recreation and culture .....	8 335	2 817	11 152
Roads and bridges .....	16 841	12 079	28 920
Street lighting .....	1 449	31	1 480
Plant purchases n.e.c. ....	—	2 528	2 528
Other outlay .....	1 994	1 666	3 661
<b>Total outlay .....</b>	<b>53 113</b>	<b>24 286</b>	<b>77 399</b>

(a) Comprises outlay from revenue and loans.

### Rates

Under the *Local Government Act* 1962, rates may be based on assessed annual value (i.e. the gross annual income, at the time of valuation, that the person owning the land might obtain by letting the land and its fixtures to a tenant), unimproved value (i.e. value of land only), the capital value (i.e. value of land plus improvements), or upon a composite value incorporating the unimproved value plus some arbitrary proportion of the value of improvements.

In Tasmania, it has been usual for rates to be based on annual values despite isolated and unsuccessful campaigns in favour of taxing on unimproved value only. In estimating annual value, the valuer is taking into account not only the land but also the improvements (e.g. buildings) so there is, in fact, a close relationship between movements in the total capital value of any property and movements in its assessed annual value. The *Land Valuation Act* 1971 consolidated and amended the law relating to land valuation.

#### *System of Valuation*

The valuation of property is carried out by a State Government authority, the Land Valuation Branch. Its valuations form the basis of two distinct taxes: (i) land tax collected by the State; and (ii) rates collected by local government authorities on the basis of assessed annual values.

Until 1975-76, land tax was based on the unimproved value of land. The *Land Valuation Act* 1971 set up the mechanism by which the basis could be changed to 'land value', being the capital value of the land in its present state but excluding the value of buildings and other artificially established improvements. For a complete definition of 'land value', reference should be made to the Act.

Since it is impossible to completely revalue all properties within the State in the course of a single year, revaluation is carried out on a rotational basis, e.g. St Leonards, New Norfolk and Lilydale were valued in 1976 and again in 1981.

Tasmania is the only state which uses the *assessed annual value* system of rating properties in all local government areas. In New South Wales and Queensland, site value rating is used almost exclusively and the majority of all local government authorities in Australia make use of the site value of property in determining at least part of their rates. Under site value rating, rates are based on the site (unimproved land) value of properties only, whereas under the assessed annual value system of rating, rates are based on a notional earning capacity of properties.

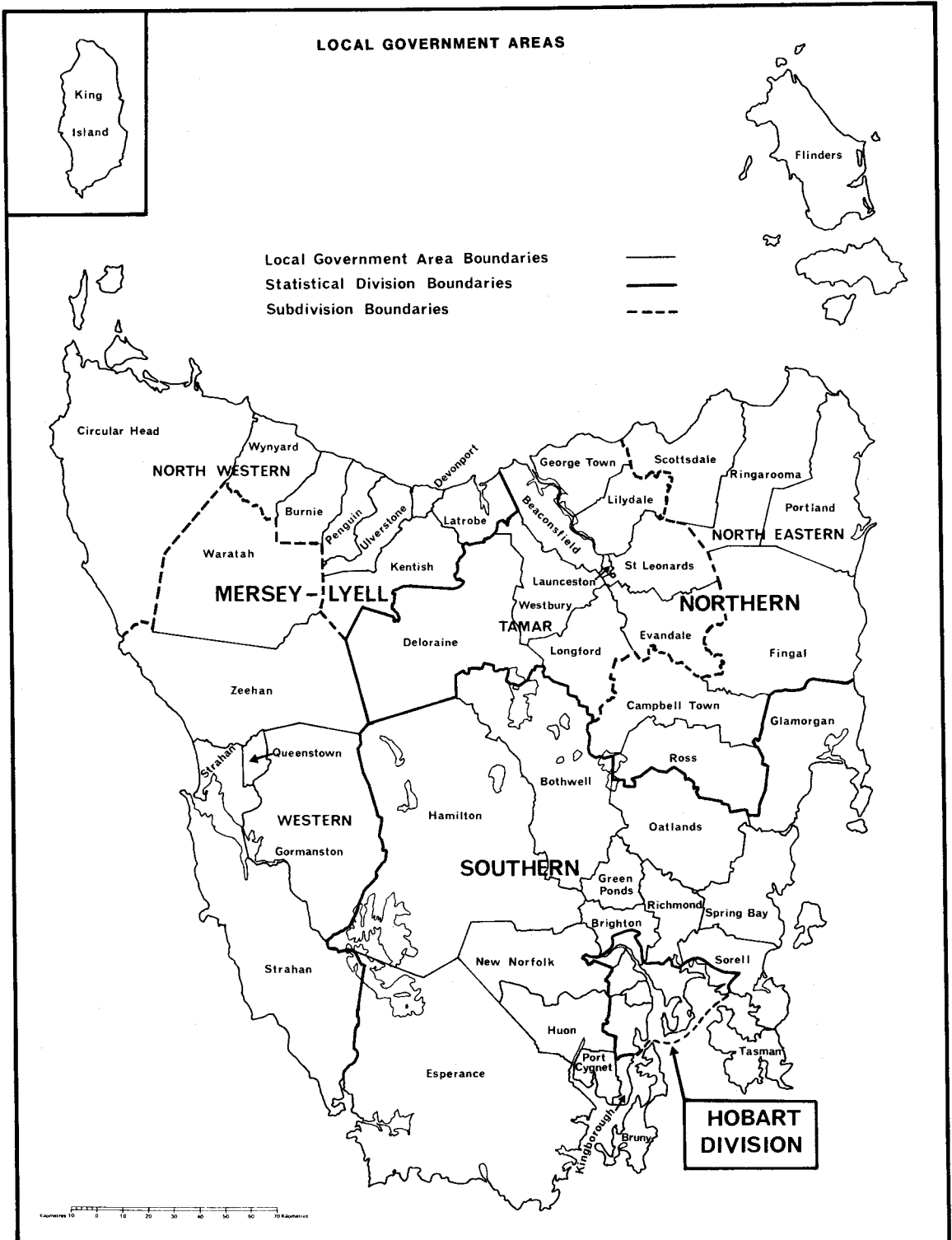


The following table shows the total value of all properties for local authorities:

**Value of Properties: Local Government Authorities**

<i>Local Government Authority</i>	<i>Year of revaluation (a)</i>	<i>Land Value</i>	<i>Capital Value</i>	<i>Assessed Annual Value</i>
Beaconsfield .....	1979	71 705 500	205 123 700	11 357 058
Bothwell .....	1977	11 147 150	23 355 600	980 902
Brighton .....	1978	42 594 800	118 278 500	6 039 694
Bruny .....	1980	9 237 100	15 620 275	641 164
Burnie .....	1980	111 178 686	355 982 420	23 512 992
Campbell Town .....	1977	12 265 970	25 861 250	1 258 008
Circular Head .....	1978	34 126 030	92 064 700	4 673 686
Clarence .....	1979	201 755 670	627 122 550	38 109 544
Deloraine .....	1981	43 068 900	93 765 000	4 629 586
Devonport .....	1977	84 757 968	320 791 470	19 431 886
Esperance .....	1978	11 230 825	37 185 800	1 765 546
Evandale .....	1977	15 504 850	38 443 600	2 004 192
Fingal .....	1979	13 981 620	32 976 400	1 726 900
Flinders .....	1978	9 887 050	20 768 050	954 772
George Town .....	1977	23 363 180	112 597 685	7 028 576
Glamorgan .....	1980	19 200 465	44 586 510	2 221 160
Glenorchy .....	1978	188 690 370	614 496 610	41 740 008
Gormanston .....	1981	70 595	221 540	43 076
Green Ponds .....	1980	11 466 550	22 543 050	981 170
Hamilton .....	1977	15 702 400	33 205 650	1 527 127
Hobart .....	1979	380 512 067	1 317 912 686	86 570 972
Huon .....	1980	20 769 500	61 784 600	3 156 016
Kentish .....	1978	21 806 300	52 288 300	2 528 458
Kingborough .....	1977	96 798 350	270 785 600	14 226 600
King Island .....	1981	17 536 730	47 897 310	2 438 120
Latrobe .....	1981	57 028 700	131 951 050	7 073 266
Launceston .....	1980	202 204 548	644 681 450	52 126 810
Lilydale .....	1981	51 261 850	148 174 550	9 037 488
Longford .....	1979	38 235 300	93 234 630	5 053 226
New Norfolk .....	1981	42 716 510	157 593 800	9 545 592
Oatlands .....	1981	42 914 300	80 163 450	3 388 522
Penguin .....	1979	21 007 810	61 182 010	3 147 502
Port Cygnet .....	1981	16 659 285	37 283 390	1 771 886
Portland .....	1978	16 212 750	41 415 000	2 210 738
Queenstown .....	1981	1 911 725	27 161 995	2 378 702
Richmond .....	1980	21 556 260	42 873 920	1 919 682
Ringarooma .....	1978	10 248 960	23 701 305	1 179 682
Ross .....	1977	7 968 550	14 304 750	622 292
St Leonards .....	1981	78 927 650	270 460 500	18 570 016
Scottsdale .....	1977	21 515 685	61 966 400	3 130 962
Sorell .....	1977	33 597 450	90 041 540	4 444 046
Spring Bay .....	1980	15 680 875	43 877 915	2 179 564
Strahan .....	1981	956 630	5 136 250	351 744
Tasman .....	1981	13 224 800	31 041 400	1 367 650
Ulverstone .....	1979	64 507 812	183 929 250	10 190 196
Waratah .....	1981	2 056 922	20 158 992	1 322 164
Westbury .....	1978	33 110 700	89 045 150	4 933 716
Wynyard .....	1977	41 307 470	122 593 300	6 491 780
Zeehan .....	1981	5 817 520	47 636 170	3 479 022
<b>Total .....</b>		<b>2 308 988 688</b>	<b>7 055 267 023</b>	<b>435 463 461</b>

(a) Latest revaluation effective from 1 July of year shown.



The table that follows shows the value of property in Tasmania for recent years:

**Total Property Valuation of All Local Government Areas, Tasmania at 1 July**  
(\$ Million)

Year	Total capital value	Assessed annual value	Land value	Year	Total capital value	Assessed annual value	Land value
1977	3 531.99	218.86	1 155.61	1980	6 448.32	397.69	2 092.20
1978	4 241.72	260.11	1 401.17	1981	7 055.27	435.46	2 308.99
1979	5 678.18	344.62	1 865.19	1982	7 701.97	480.36	2 597.54

### Rate Collections

The following table shows details of the rates collected in Tasmania for the latest four-year period available:

**Rates Received by Local Government Authorities, Tasmania**  
(\$'000)

Rate	1978-79	1979-80	1980-81	1981-82
Ordinary services .....	34 721	37 319	38 619	43 682
Business undertakings—				
Water .....	11 721	13 566	15 190	19 061
Sewerage .....	9 597	11 230	12 403	13 778
Total .....	21 318	24 796	27 593	32 839
Grand total .....	56 039	62 114	66 213	76 520
Percentage increase (a) .....	11.3	10.8	6.6	15.6

(a) Over previous year.

### Grants to Local Government

#### Background

In recent years, major developments have occurred in relation to the finances of local government in Australia. The combination of rate structures reaching 'saturation' levels and rising costs of operation, together with increased responsibilities for facilities in areas such as recreation, health, roads, water and sewerage, etc., has led local government throughout Australia to press for general revenue grants from governments to supplement revenue raised from rates. This demand has arisen despite the increasing assistance given in the form of specific purpose grants from both State and Federal Governments.

In 1973 the Commonwealth Parliament passed the *Grants Commission Act 1973* repealing the *Commonwealth Grants Commission Act 1933*. The 1973 Act laid down procedures for local government authorities to apply for financial assistance from the Commonwealth and for such applications to be the subject of inquiry and report by the Grants Commission. It also provided that the grants to the states for local authorities should be provided in such a way as to promote financial equality between local authorities and regional groupings of such authorities.

These arrangements were replaced in 1976 by the tax sharing arrangements described below, and the Grants Commission ceased to be responsible for recommending amounts to be paid to specific local authorities (*Commonwealth Grants Commission Act 1976*).

### *Local Government Assistance Under The Tax Sharing Arrangements*

The arrangements agreed to in 1976 between the Commonwealth and the states for the sharing of personal income tax collections with local government, and subsequently incorporated in the *Local Government (Personal Income Tax Sharing) Act 1976*, are broadly as follows:

- (i) each year local government in the states will be entitled to a fixed percentage of net personal income tax collections in the previous year;
- (ii) the amount so derived will be divided among the states in specified proportions which are subject to recommendation by the Commonwealth Grants Commission;
- (iii) each state will allocate a minimum of 30 per cent of the assistance among local authorities on a basis which takes into account the respective populations of those local authorities, but which may also take into account the respective sizes and the respective population densities, and any other matters agreed upon between the Commonwealth and the state concerned;
- (iv) the remaining assistance will be allocated among the local authorities, having regard to their respective financial needs, on the recommendation of State Grants Commissions.

In 1979-80 the Act was amended on two occasions. The effect of these amendments was to increase the share of net personal income tax collections allocated to local government in the States from 1.52 per cent to 1.75 per cent of the previous year's collections in 1979-80 and to 2 per cent in 1980-81 at which it has remained.

#### *Conditions of Operation*

For 1982-83, the Federal Government allocated \$424.5m to the States for distribution to local governments. The distribution of this amount between the States was made on a percentage basis recommended by the Commonwealth Grants Commission. The following state percentages and amounts were derived under the formula determined by that Commission:

Federal Grants to Local Government, 1982-83		
State	Percentage of total	Amount of grant (\$'000)
New South Wales .....	36.4977	154 928
Victoria .....	25.4513	108 037
Queensland .....	16.8606	71 571
Western Australia .....	9.3897	39 858
South Australia .....	8.6010	36 510
Tasmania .....	3.1997	13 582
Total .....	100.0000	424 486

For 1982-83 30 per cent (\$4.1m) of the Tasmanian allocation (\$13.6m) was distributed on a per head of population basis. The balance (\$9.5m) was distributed by the State Grants Commission as equalisation grants.

#### *Principles for Determining Equalisation Grants*

The functions of the State Grants Commission are largely covered by Section 9 of the Act, which sets down certain broad principles to be followed. The fundamental guideline for the determination of grants is set out in Section 9 (2) (d) of the Act. It requires the Commission to ensure that, as far as possible, the grant recommended for a municipality will be an amount which, providing it makes a reasonable rating effort, will enable it to provide services at about the same standard as other municipalities of a similar type. This is viewed as the principle of relative financial need. In determining the grants necessary to equalise the fiscal capacity of municipalities, the Commission has

adopted the principle that a grant must basically reflect differences between:

- (i) the revenue-raising capacity of municipalities; and
- (ii) the relative cost of providing services (expenditure differentials).

The Commission has adopted methods to identify and measure those factors which affect relative rateable capacity and the cost of functioning at a given standard. To the extent to which a municipality is below the standard or faced with higher costs, a *prima facie* case exists for an equalisation component.

For 1976-77 the Commission decided that an equal allocation should be made between revenue and expenditure components but, in so doing, included the 'per capita' element (30 per cent) of the funds in the revenue component. The Commission, in 1977-78, re-examined this basis of allocation and came to the conclusion that, overall, it tended to unduly favour larger municipalities. It has now decided that allocation to revenue and expenditure components should be equal within the amount available for equalisation grants. From 1980-81 onwards the weighting for revenue and expenditure inequalities has been on a 50-50 basis. The next table shows the allocation of federal grants to revenue and expenditure components and the per capita grants portion for the last four years:

**Federal Financial Assistance Grants to Local Government, Tasmania  
(\$'000)**

<i>Allocation</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Equalisation grants—				
Revenue disabilities .....	2 235	3 368	3 929	4 754
Expenditure disabilities .....	2 731	3 368	3 929	4 754
Total .....	4 966	6 737	7 859	9 508
Per capita grant .....	2 128	2 887	3 368	4 075
Total grant .....	7 095	9 624	11 227	13 582

The Commonwealth Grants Commission's only role under the new scheme is to advise of the appropriate percentage distribution of federal personal income tax between the states, and, in the initial period, to provide advice to the state bodies on methods for calculating grants to municipalities.

#### *Financial Assistance by Grants Commission*

The following table provides details of financial assistance to Tasmanian municipalities from distributions under the revised scheme for 1981-82 and 1982-83.

**Federal Government Financial Assistance to Local Government in Tasmania (a)**

<i>Local government area</i>	<i>1981-82</i>				<i>1982-83</i>			
	<i>Per capita grant</i>	<i>Equalisation grant</i>	<i>Total grant</i>	<i>Per head of population (b)</i>	<i>Per capita grant</i>	<i>Equalisation grant</i>	<i>Total grant</i>	<i>Per head of population (b)</i>
	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$</i>
Beaconsfield .....	111	223	334	23.61	135	269	404	28.15
Bothwell .....	6	63	69	93.76	7	78	85	118.14
Brighton .....	66	152	218	22.62	92	188	280	26.55
Bruny .....	3	38	41	103.98	4	46	50	127.49
Burnie .....	158	315	473	23.28	194	376	570	27.82
Campbell Town .....	12	59	71	46.95	15	71	86	55.88
Circular Head .....	62	238	300	37.83	76	291	367	46.35
Clarence .....	360	648	1 008	22.08	435	780	1 215	26.53
Deloraine .....	39	133	172	33.94	48	163	211	42.02
Devonport .....	183	365	548	23.09	227	437	664	27.42

*continued next page*

## Federal Government Financial Assistance to Local Government in Tasmania (a)—continued

Local government area	1981-82				1982-83			
	Per capita grant	Equalisation grant	Total grant	Per head of population (b)	Per capita grant	Equalisation grant	Total grant	Per head of population (b)
	\$'000	\$'000	\$'000	\$	\$'000	\$'000	\$'000	\$
Esperance .....	25	115	140	43.95	30	141	171	54.42
Evandale .....	14	59	73	37.01	19	72	91	45.45
Fingal .....	23	123	146	49.51	28	150	178	61.01
Flinders .....	8	90	98	88.27	11	110	121	109.63
George Town .....	59	128	187	25.59	70	153	223	30.46
Glamorgan .....	12	68	79	48.90	15	82	97	64.91
Glenorchy .....	338	496	834	19.90	400	595	995	23.88
Gormanston .....	2	29	31	238.42	1	30	31	284.00
Green Ponds .....	7	44	51	51.18	10	54	64	62.30
Hamilton .....	23	123	146	57.54	24	150	174	69.10
Hobart .....	391	392	783	16.44	454	465	919	19.27
Huon .....	39	143	182	37.38	47	175	222	45.78
Kentish .....	32	140	172	39.85	41	172	213	48.55
King Island .....	22	118	140	51.49	26	145	171	62.82
Kingborough .....	133	239	372	21.16	168	291	459	25.55
Latrobe .....	47	117	164	29.32	53	141	194	34.35
Launceston .....	258	355	613	19.29	303	424	727	22.88
Lilydale .....	73	193	266	29.46	86	232	318	35.00
Longford .....	45	104	149	25.62	56	128	184	31.39
New Norfolk .....	82	180	262	26.89	93	220	313	32.08
Oatlands .....	18	105	123	58.35	20	128	148	72.21
Penguin .....	42	113	155	29.15	51	139	190	35.85
Port Cygnet .....	17	90	107	46.41	22	109	131	56.93
Portland .....	15	70	85	39.35	21	88	109	49.32
Queenstown .....	33	165	198	52.19	36	197	233	63.04
Richmond .....	14	82	96	51.31	18	100	118	63.36
Ringarooma .....	18	111	129	55.72	22	136	158	67.25
Ross .....	4	47	51	93.57	5	59	64	123.55
St Leonards .....	160	321	481	23.09	199	385	584	27.91
Scottsdale .....	33	129	162	37.60	41	159	200	45.40
Sorell .....	39	153	192	35.51	52	183	235	41.99
Spring Bay .....	15	82	97	48.62	19	101	120	62.17
Strahan .....	3	42	45	105.46	4	53	57	129.78
Tasman .....	7	65	72	67.05	10	81	91	83.00
Ulverstone .....	104	216	320	24.46	125	263	388	29.25
Waratah .....	18	89	107	49.74	21	109	130	59.41
Westbury .....	49	110	159	23.49	64	134	198	29.09
Wynyard .....	98	231	329	27.33	115	280	395	32.37
Zeehan .....	49	148	197	29.36	64	175	239	35.55
Tasmania .....	3 368	7 859	11 227	26.27	4 075	9 508	13 582	31.60

(a) Excludes grants for specific purposes. Comprises: (i) grants to municipalities on a population basis; and (ii) equalisation grants as determined by the State Grants Commission.

(b) Figures are based on the populations of the municipalities at the beginning of each year.

## Trading Activities

The classification 'trading activities' is used in Australian local government finance statistics to include municipal tram and bus services, municipal electricity supply (generation or distribution), municipal water and sewerage schemes, municipal abattoirs, etc. In Tasmanian local government finance statistics, electricity supply ceased to appear as from 1948-49 (the Hydro-Electric Commission is now the sole supplier). Municipal tram

and bus services ceased to appear as an item in 1955-56 when the Metropolitan Transport Trust acquired the city transport services operating in Hobart, Launceston and Burnie. Consequently, the only activities under the heading of municipal 'business undertakings' in current Tasmanian statistics relate to water supply, sewerage and abattoirs.

The next table shows both current and capital transactions for the trading activities of all local government authorities:

Local Government Authorities, Tasmania: Trading Activities, 1981-82  
(\$'000)

<i>Particulars</i>	<i>Water</i>	<i>Sewerage</i>	<i>Abattoirs</i>	<i>Total</i>
<b>Current transactions—</b>				
Current income				
Rates .....	19 061	13 778	—	32 839
Grants .....	7 032	642	—	7 674
Other (a) .....	2 000	1 184	419	3 603
Total .....	28 092	15 604	419	44 115
Current outlay—				
Working expenses (b) .....	10 431	6 315	306	17 052
Interest paid .....	1 759	5 962	—	7 721
Other (c) .....	12 778	53	34	12 864
Total .....	24 968	12 330	340	37 637
Surplus or deficit (—) .....	3 125	3 274	80	6 478
<b>Capital transactions—</b>				
Source of funds				
Loans .....	1 980	5 749	40	7 769
Grants .....	1 759	97	—	1 856
Reimbursements .....	621	260	19	901
Other (d) .....	954	3 276	11	4 241
Total .....	5 315	9 383	70	14 767
Use of funds—				
Land and fixed assets ....	4 210	7 546	59	11 815
Debt redemption .....	1 104	1 834	10	2 949
Other (e) .....	—	3	—	3
Total .....	5 315	9 383	70	14 767

(a) Comprises sales and charges, interest received, and transfers from ordinary services.

(b) Include wages and salaries, purchase of goods and services, pay-roll tax and depreciation.

(c) Levies paid to government and semi-government authorities and transfers to ordinary services.

(d) Depreciation allowances, contributions and donations received, advances repaid by public, sales of land and other fixed assets, surplus on current account, reduction in bank balances, etc. A negative amount can arise when, for example, there has been an increase in bank balances (e.g. as a result of loan moneys raised but not yet spent).

(e) Increase in stocks and advances to public.

### Loan Receipts

At 30 June 1982 the aggregate loan debt of all local government authorities was \$171 755 100 of which only \$10 762 100 (i.e. 6.3 per cent) was owed to the Commonwealth and state governments. The main Tasmanian sources of loans for local government authorities are banks, superannuation and various trust funds, and insurance companies. The cities of Hobart and Launceston also raise loans by public issues.



The next table shows the loan account receipts of all local government authorities:

**Local Government Authorities, Tasmania: Loan Raisings**  
(\$'000)

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Loan raisings for—					
Sewerage .....	5 395	4 897	4 352	6 801	5 749
Water Supply .....	769	1 796	1 383	1 765	1 980
Ordinary services .....	12 350	13 179	9 342	7 822	6 086(a)
Total raisings .....	18 514	19 872	15 077	16 388	13 815

(a) Includes abattoir loan raisings of \$40 000.

The amount that any local government authority can raise is governed by:

- (i) the difficulty in finding willing lenders;
- (ii) the fact that the approval of the State Treasury is required; and
- (iii) the ability of an authority to repay its debt. The *Local Government Act 1962* restricts the total indebtedness of an authority to 10 times its average annual income for the preceding three financial years.

The following table shows, in summary form, loan raisings and loan debt:

**Local Government Authorities, Tasmania: Loan Raisings and Loan Debt**  
(\$'000)

<i>Year</i>	<i>Loan raisings during financial year</i>	<i>Loan debt at 30 June</i>		
		<i>To State and Commonwealth Government</i>	<i>To other creditors</i>	<i>Total</i>
1977-78 .....	18 514	6 556	129 729	136 285
1978-79 .....	19 872	9 563	140 370	149 934
1979-80 .....	15 077	12 105	145 195	157 300
1980-81 .....	16 388	11 958	153 874	165 832
1981-82 .....	13 815	10 762	160 993	171 755

#### *Source of Loan Funds*

It can be seen from the preceding table that the local government loan debt includes only a small liability in respect of advances made by the State Treasury. This scheme was phased out at the end of 1976-77.

#### *Instalment Debentures*

Much of the debt of the municipalities is in the form of instalment debentures which involve equal periodic payments (usually half-yearly); such payments are allocated to redemption and interest in changing proportions as the loan approaches maturity.

#### **Water and Sewerage Connections**

The following table shows the number of properties in each local government area which are connected to water and sewerage schemes.

Details are those reported by local government authorities for schemes which are their responsibility (e.g. some mining towns are excluded) and relate broadly to the number of properties, whether residential or not, connected to mains. A uniform definition of a property connected has not, however, been used by all authorities (e.g. differences can occur where several properties are served by one connection or conversely where there are several connections to one property). Care should therefore be used in comparing details for different local government areas.

**Number of Properties in each Local Government Area Connected to Water and Sewerage Schemes at  
30 June, 1982**

<i>Local government area</i>	<i>Water</i>	<i>Sewerage</i>
Beaconsfield .....	4 434	3 227
Bothwell .....	148	—
Brighton .....	2 063	1 951
Bruny .....	—	—
Burnie .....	5 841	6 510
Campbell Town .....	376	330
Circular Head .....	1 553	870
Clarence .....	13 102	11 787
Deloraine .....	895	658
Devonport .....	8 405	8 622
Esperence .....	1 066	213
Evandale .....	560	300
Fingal .....	960	—
Flinders .....	126	—
George Town .....	2 218	1 831
Glamorgan .....	856	346
Glenorchy .....	13 480	13 541
Gormanston .....	50	—
Green Ponds .....	189	166
Hamilton .....	184	—
Hobart .....	18 320	17 745
Huon .....	1 071	267
Kentish .....	661	586
King Island .....	343	337
Kingborough .....	5 084	3 877
Latrobe .....	1 378	1 016
Launceston .....	15 131	15 180
Lilydale .....	2 527	2 147
Longford .....	1 530	1 180
New Norfolk .....	2 175	2 001
Oatlands .....	345	221
Penguin .....	1 393	1 032
Port Cygnet .....	430	249
Portland .....	1 010	466
Queenstown .....	1 282	1 282
Richmond .....	400	303
Ringarooma .....	566	—
Ross .....	157	86
St Leonards .....	6 413	6 372
Scottsdale .....	1 729	1 348
Sorell .....	969	1 040
Spring Bay .....	693	247
Strahan .....	277	5
Tasman .....	—	—
Ulverstone .....	3 988	3 546
Waratah .....	—	—
Westbury .....	1 504	1 171
Wynyard .....	2 827	2 616
Zeehan .....	1 304	1 160
Tasmania .....	130 013	115 832

**Employees of Local Government Authorities**

The following table shows total employees of local government authorities over a six-year period. The number of employees of individual authorities ranges from one to over 500 persons.

**Local Government Authorities, Tasmania: Persons Employed (a) at 30 June**

<i>Particulars</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>
<b>General administration—</b>						
Males .....	533	557	590	583	578	587
Females .....	281	297	292	301	295	291
Persons .....	814	854	882	884	873	878
<b>All other services—</b>						
Males .....	2 304	2 191	2 120	2 017	1 964	2 078
Females .....	184	186	199	205	215	209
Persons .....	2 488	2 377	2 319	2 222	2 179	2 287
<b>Total—</b>						
Males .....	2 837	2 748	2 710	2 600	2 542	2 665
Females .....	465	483	491	506	510	500
Persons .....	3 302	3 231	3 201	3 106	3 052	3 165

(a) Comprises permanent and temporary employees; part-time employees are excluded.

**WATER SUPPLY AND SEWERAGE**

Water supply and sewerage were once exclusively the responsibility of the cities and municipalities. Three semi-government authorities, the Metropolitan Water Board, the Rivers and Water Supply Commission and the North-West Regional Water Authority, now operate bulk supply schemes, piping water for distribution by the local government authorities in the Hobart, Launceston and North-West areas, and directly to certain industrial consumers. These authorities and their functions are described below.

**Metropolitan Water Board**

The overall control of water supply in Hobart, Glenorchy, Clarence and Kingborough is vested in the Metropolitan Water Board, but the four local government authorities retain primary responsibility for reticulation to consumers and rating.

The Board has a large pumping station and treatment plant at Bryn Estyn on the Derwent River above New Norfolk and water is supplied from the plant to Hobart's western shore via the West Derwent Pipeline and to the eastern shore suburbs by the Southern Regional Water Supply Scheme. The capacity of these pipelines are 136 megalitres and 27 megalitres per day respectively and constitute the main source of supply available to the Board.

During 1981-82 the Board commenced a major augmentation of the West Derwent Pipeline and Bryn Estyn plant which is expected to be completed in 1984 at a cost of \$25 million.

The Board also directs the operation of bulk supply works vested in the metropolitan municipalities. These include the Lake Fenton Pipeline and Mount Wellington storages in the Hobart and Glenorchy municipalities.

Besides supplying the metropolitan municipalities the Board sells bulk water to major industrial consumers and the rural municipalities of New Norfolk, Brighton, Richmond, Green Ponds and Sorell. Since its inception in 1962 the Board has extended its services to the towns of Cambridge, Midway Point, Sorell, Seven Mile Beach, Lauderdale and Rokeby on the eastern shore, while on the western shore extensions serve Margate, Snug and Howden.

*Financial Relationship*

Under the *Metropolitan Water Board Act 1961* the four metropolitan local government authorities no longer borrow money for metropolitan water works, but are provided with the necessary capital by the Board. The Board obtains its funds from private lenders and the State Loan Fund, the local authorities in turn being required to make revenue contributions to the Board. The effect of this arrangement can be seen in State local government loan debt tables where the debt in respect of water shows only very minor annual increases; in effect, the expenditure of the four metropolitan local government authorities for water works undertaken since 1961 is reflected in the debt of the Board and not in debts of the municipalities. At 30 June 1983 the loan debt of the Board to the State Treasury was \$16.8 million and to other lenders \$29.0 million.

The financial relationship between the Board and the four metropolitan local government authorities is summarised in the following table:

**Metropolitan Water Board: Income and Expenditure**  
(\$'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>Income</i>					
Municipal contributions—					
Hobart .....	2 654	2 924	3 231	3 690	4 214
Glenorchy .....	1 344	1 398	1 635	1 807	1 996
Clarence .....	1 345	1 375	1 372	1 448	1 606
Kingborough .....	323	351	431	491	588
Special consumers .....	529	592	565	693	759
Rural areas .....	647	914	839	993	1 175
Other revenue .....	217	770	1 408	1 558	1 549
<b>Total .....</b>	<b>7 059</b>	<b>8 324</b>	<b>9 481</b>	<b>10 680</b>	<b>11 887</b>
<i>Expenditure</i>					
Reimbursement of working expenses—					
Hobart .....	1 139	1 234	1 424	1 585	1 806
Glenorchy .....	525	553	638	673	819
Clarence .....	362	420	458	509	563
Kingborough .....	182	193	227	246	269
Bulk supply, operation costs .....	1 220	1 509	1 629	1 836	2 367
Administrative expenses .....	193	255	355	394	424
Interest .....	2 259	2 707	3 217	3 437	4 135
Depreciation .....	576	806	918	1 001	1 117
Superannuation .....	181	181	209	244	289
Other .....	3	—	—	—	4
<b>Total .....</b>	<b>6 640</b>	<b>7 858</b>	<b>9 075</b>	<b>9 925</b>	<b>11 793</b>

The preceding table excludes capital contributions. These are shown in the next table:

**Metropolitan Water Board: Capital Contributions to Southern Local  
Government Authorities  
(\$'000)**

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<b>Hobart—</b>						
Construction and improvement .....	503	772	481	624	325	417
Loan redemption and conversion .....	34	33	35	31	32	16
<b>Total .....</b>	<b>537</b>	<b>805</b>	<b>516</b>	<b>655</b>	<b>357</b>	<b>433</b>
<b>Glenorchy—</b>						
Construction and improvement .....	282	177	299	148	481	271
Loan redemption and conversion .....	42	40	43	43	37	31
<b>Total .....</b>	<b>325</b>	<b>217</b>	<b>341</b>	<b>191</b>	<b>518</b>	<b>302</b>
<b>Clarence—</b>						
Construction and improvement .....	140	140	161	181	272	769
Loan redemption and conversion .....	70	50	47	46	43	34
<b>Total .....</b>	<b>210</b>	<b>190</b>	<b>208</b>	<b>227</b>	<b>315</b>	<b>803</b>
<b>Kingborough—</b>						
Construction and improvement .....	219	195	527	218	64	184
Loan redemption and conversion .....	8	17	6	8	5	5
<b>Total .....</b>	<b>228</b>	<b>212</b>	<b>533</b>	<b>226</b>	<b>69</b>	<b>189</b>
<b>Total—</b>						
Construction and improvement .....	1 145	1 284	1 468	1 171	1 142	1 641
Loan redemption and conversion .....	154	140	131	128	117	86
<b>Grand total .....</b>	<b>1 299</b>	<b>1 424</b>	<b>1 599</b>	<b>1 299</b>	<b>1 259</b>	<b>1 727</b>

The Board makes capital contributions to the four local government authorities for: (i) construction and improvement of their water works; and (ii) redemption of their water debt raised prior to creation of the Board. The Board finances these capital contributions by: (i) borrowing from the State Government; (ii) raising private loans; and (iii) application of internal funds, e.g. depreciation funds. The cost of servicing loans, raised by the Board to meet local government requirements, is met from revenue contributions by the four local government authorities.

#### *Capital Expenditure*

The major item of expenditure by the Board in 1982-83 was \$9 016 374 for the augmentation of the West Derwent Scheme. Expenditure on other projects including municipal reticulation works was \$1 842 094. The works programme was financed from borrowings carried over from the previous year together with \$8 100 000 from loans raised in 1982-83 and \$485 000 from the Appropriation Account.

#### **North-West Regional Water Authority**

This Authority was constituted under the provisions of the *North-West Regional Water Act 1976* and is vested with the control and management of the water supply undertaking within the North-West Regional Water District.

Since 1 July 1977 all works associated with the storage and distribution of water by the local government authorities of Circular Head, Devonport, Kentish, Latrobe, Penguin, Ulverstone and Wynyard in the constituent water districts have been transferred to and vested in the Authority. The Municipality of Burnie is not included in the water district.

The financial relationship between the Authority and the seven local authorities is summarised in the following tables:

**North-West Regional Water Authority: Income and Expenditure**  
(£'000)

<i>Particulars</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>Income</i>			
Municipal contributions—			
Devonport .....	1 638	2 219	2 883
Ulverstone .....	637	863	1 114
Wynyard .....	468	630	807
Latrobe .....	231	301	433
Circular Head .....	225	326	412
Kentish .....	105	140	180
Penguin .....	163	222	306
Interest .....	144	151	401
Contribution to loan interest and expenses (a) .....	99	266	(a)189
Other receipts .....	—	8	7
<b>Total .....</b>	<b>3 710</b>	<b>5 125</b>	<b>6 732</b>
<i>Expenditure</i>			
Reimbursement of working expenses—			
Devonport .....	698	733	873
Ulverstone .....	211	257	280
Wynyard .....	141	165	175
Latrobe .....	103	117	104
Circular Head .....	153	149	185
Kentish .....	38	38	39
Penguin .....	85	61	65
Operating expenses .....	495	819	1 065
Administration expenses .....	183	261	473
Interest .....	1 469	2 090	2 822
Depreciation .....	155	182	260
<b>Total .....</b>	<b>3 730</b>	<b>4 874</b>	<b>6 341</b>

(a) The Authority has submitted a claim to the Treasury for \$189 316 for reimbursement of additional interest and borrowing charges which it incurred to 30 June 1983 as a result of certain external borrowings.

**North-West Regional Water Authority: Capital Contribution to North-West Local Government Authorities**  
(£'000)

<i>Particulars</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Devonport—			
Construction and improvement .....	140	185	235
Loan redemption and conversion .....	—	—	—
<b>Total .....</b>	<b>140</b>	<b>185</b>	<b>235</b>
Ulverstone—			
Construction and improvement .....	65	75	73
Loan redemption and conversion .....	—	—	—
<b>Total .....</b>	<b>65</b>	<b>75</b>	<b>73</b>
Wynyard—			
Construction and improvement .....	37	54	225
Loan redemption and conversion .....	—	—	—
<b>Total .....</b>	<b>37</b>	<b>54</b>	<b>225</b>

*continued next page*

North-West Regional Water Authority: Capital Contribution to North-West Local Government Authorities  
(\$'000)—continued

Particulars	1980-81	1981-82	1982-83
Latrobe—			
Construction and improvement .....	114	99	100
Loan redemption and conversion .....	—	r121	—
Total .....	114	r220	100
Circular Head—			
Construction and improvement .....	20	29	98
Loan redemption and conversion .....	—	—	—
Total .....	20	29	98
Kentish—			
Construction and improvement .....	11	15	24
Loan redemption and conversion .....	—	—	—
Total .....	11	15	24
Penguin—			
Construction and improvement .....	15	20	24
Loan redemption and conversion .....	—	—	—
Total .....	15	20	24
Total—			
Construction and improvement .....	401	477	779
Loan redemption and conversion .....	—	r121	—
Grand Total .....	401	r598	779

Funds raised by the Authority for capital purposes in 1982-83 totalled \$5 500 000 all of which was raised by local external borrowings.

The main items of capital expenditure during 1982-83 were \$365 362 for completion of construction of the Cam Pump Station and Treatment Plant, \$920 503 for construction of reservoirs, \$233 418 for remodelling and replacement of pumps at Paloona Pump Station, \$150 679 for construction of trunk main from Sheffield to Railton and \$238 650 for commencement of construction of treatment plants at Smithton and Penguin. Total capital expenditure for 1982-83 was \$2 797 838.

### Rivers and Water Supply Commission

#### Introduction

The Commission was established by the *Water Act* 1957 which came into operation by proclamation on 1 September 1958.

The *Water Act* 1957 provides for the best use of the natural waters of the State and, to that end, to establish an authority to initiate and control the use of those waters, to codify the statute law affecting their use, to provide for the establishment of local river and water supply authorities, to repeal the *Water, Sewerage and Drainage Board Act* 1944 and to repeal or amend other Acts.



### *Municipal Water, Sewerage and Drainage Works*

The Commission examines all proposed municipal water supply schemes before construction commences to ensure that the schemes are economically sound. (Schemes proposed by the cities of Hobart, Launceston, Glenorchy and Devonport are exempt from examination by the Commission.)

A total of 77 municipal proposals were approved by the Commission in 1982-83 for a total value of \$3 189 484.

### *Financial Assistance to Municipalities*

Annual revenue subsidies are paid to municipalities on the recommendation of the Commission to assist them in meeting the costs of operating their water supply and sewerage schemes. The payment of such subsidies is authorised by Section 40 of the *Water Act 1957*, where it is considered the works would be beyond the financial capacity of the municipal authority. Anticipated annual charges are compared with the revenue likely to be derived from the district to be served. Eligibility for financial assistance is dependent upon a municipality raising revenue in accordance with an agreed standard.

In determining the amount of financial assistance payable to any municipality, the Commission has regard for the maximum revenue which the municipality might reasonably be expected to raise from rates and charges. This process had led to the determination of an annual revenue requirement for each subsidised scheme and this is reviewed from time to time to take account of increases in annual values and the capacity of the ratepayers to contribute to the annual costs of water and sewerage schemes.

### *Regional Schemes*

*North Esk Regional Water Supply:* Under the provisions of the *North Esk Regional Water Act 1960*, the Commission has responsibilities for the supply of bulk water to the municipalities of St Leonards, Lilydale and George Town, together with Prospect Vale and Hadspen in the Westbury municipality and White Hills in the Evandale municipality.

The Commission also supplies water to industries in Bell Bay and a number of wayside consumers outside the larger population centres.

The main source of supply for the scheme is the North Esk River at Watery Plains where up to 30 megalitres per day can be diverted into the scheme. This flows through a gravity pipeline to Chimney Saddle Water Treatment Plant where treatment includes chemical addition, flocculation, settlement filtration, pH correction and fluoridation.

Treated water is stored in the 300 megalitre dam adjacent to the works. Water is drawn from this dam, chlorinated and distributed in bulk to St Leonards and other municipalities via a 65 kilometre trunk pipeline to George Town.

There are several service reservoirs at strategic points along this pipeline and a pump station at Doctors Hill lifts water to a suitable level to serve Bell Bay and George Town.

In addition to the above source of supply, the Commission pumps water from the South Esk at Hadspen to augment the supply to Prospect Vale and Hadspen. The capacity of this pump station is 4.5 megalitres per day and there is a 2.5 megalitres per day water treatment plant adjacent to the pump station.

In the last four years the Commission has augmented the northern part of the scheme by constructing a 12 000 megalitre capacity dam and pump station on the Curries River. The pumps at present installed in the pump station can deliver 22 megalitres per day to Bell Bay via an 8 kilometre long pipeline. Water from Curries River can be delivered either to Bell Bay industries for commercial purposes without treatment other than settlement in the dam or after treatment in the Bell Bay plant into the bulk water supply system.

The total water supplied during 1982-83 was 7 889 megalitres. The total capital cost of the scheme at 30 June 1983, amounted to \$13 724 649.

*West Tamar Water Supply:* Under the provisions of the *West Tamar Water Act* 1960, the West Tamar Water Supply Scheme is vested in the Rivers and Water Supply Commission. The operation and maintenance of the scheme is carried out by the Beaconsfield Council as agent for the Commission.

The scheme supplies fully treated water to all developed areas in the Beaconsfield municipality from Riverside in the south to Ilfraville in the north.

The source of supply for the scheme is Trevallyn dam by arrangement with the Hydro-Electric Commission.

The scheme has an output capacity of 20.5 megalitres of treated water per day to a total of almost 5 000 connections, most of which are residential.

The total water consumption during 1982-83 was 2 587.6 megalitres. Total capital expenditure on the scheme at 30 June 1983, amounted to \$3 293 566.

*Prosser River Water Supply:* In 1963-64 the Commission constructed the Prosser River Scheme for the prime purpose of providing water for an alginate industry at Louisville. It also arranged to supply the town of Orford with fully treated water.

In 1969-70 the Commission received a request for water from the woodchip industry on the northern shore of Spring Bay. This involved an underwater pipeline across Spring Bay. Since that time the pipeline has supplied a fishmeal industry and several other minor consumers.

The alginate industry closed down in 1973 and this complex was later developed as a tourist resort. The fishmeal industry closed down in 1974, but was later taken over by a fish processing firm.

In more recent years the Orford supply has been extended to serve Shelley Beach and Barton Avenue on the southern side of Spring Bay has received a supply from the main supplying Louisville.

Investigations are in hand to extend the Orford scheme further to the resort at Spring Beach.

The total volume of water produced by the scheme during 1982-83 was 289 megalitres. Total capital expenditure on the scheme at 30 June 1983 amounted to \$459 080.

### *Irrigation Schemes*

*Cressy-Longford Irrigation Scheme:* The scheme is administered and operated by the Rivers and Water Supply Commission. It is the State's first major irrigation system, being officially opened in 1974. Situated some 30 km south of Launceston between Cressy and Longford, the Irrigation District covers about 10 000 hectares of some of the oldest and most intensively farmed areas in the State.

The source of supply is the tail-race of the Poatina Power Station. Water is supplied under gravity to each farm in the constituted Irrigation District through an earthen channel system, some 94 km in length.

In 1977, following requests from landholders in the area, the scheme was extended to supply an additional nine properties around Toiberry by pumping from the North Channel. Water is delivered into individual farmer's holding dams from which they draw their requirements either by pumping or gravity at rates suitable to the particular needs.

Water from the scheme can also be discharged into the Liffey River below Bracknell and at least another 20 riparian holdings within this district can be supplied.

Each piece of land within the Irrigation District and those properties which can be supplied within the Liffey River Augmented Flow District are given an 'Irrigation Right' which is an annual entitlement to a certain quantity of water.

The volume of water delivered to landowners (including those on the Liffey River)

in 1982-83 amounted to 9 809 megalitres, which is 2 174 megalitres more than the previous highest usage recorded in 1981-82. The total area irrigated is also the largest to date.

The capital cost of the scheme to 30 June 1983 amounted to \$1 414 500 of which the Commonwealth provided \$750 000 in the form of a non-repayable, non-interest bearing loan.

*Togari Water Supply:* This scheme was constructed and administered by the Closer Settlement Board up to May 1974 at which time authority to administer the scheme was vested in the Commission.

The scheme supplies water mainly for stock and washing down dairies at Togari about 30 km south-west of Smithton.

The total quantity of water used in 1982-83 was 90.4 megalitres. The total capital cost of the scheme at 30 June 1983, is approximately \$64 000.

#### *River Improvement and Drainage Works*

*Montagu Catchment River Improvement District:* The River Improvement District was proclaimed in 1978, and covers the entire catchment of the Montagu River. Main works carried out during the year were the continuing weed spraying programme and the de-silting of Fixters Creek from the old railway track to the Montagu River. The main cause of the silting has been attributed to the discharge of dairy effluent into drains, which eventually reaches Fixters Creek and causes a prolific growth of water weeds.

The western bank of the Montagu River was cleared of vegetation and a track formed for a short distance south of the Bass Highway, in order to facilitate access for weed spraying.

The total capital cost incurred at 30 June 1983, amounted to \$930.

*Furneaux Drainage Area — Flinders Island:* Flinders Island, the largest of the Furneaux Group and also the largest of the Bass Strait Islands has an area of 1 333 square km. Mean annual rainfall for the whole Island is approximately 800 mm.

Perhaps the most distinctive topographic feature on Flinders Island is a central granite spine running north-west to south-east along the Island, separating a narrow western and a broad eastern coastal plain.

The western side of the Island is steeper than the eastern part, with a better developed stream pattern and hence has less need for extensive artificial drainage systems.

Broadly speaking there are four main drainage areas on the Island: the Wingaroo area in the north east, largely undeveloped, the Furneaux Estate forming the major part of the War Service Land Settlement development on the Island, and the older established areas of Boot Jack in the south-east and Happy Valley, Whitemark, in the south-west.

Although the drainage works have been grouped into four main areas, not one of these areas has one common outfall. The most extensive of these areas, the Furneaux Estate has five separate outfalls: Logans Lagoon, Camerons Inlet, Patriarch Inlet, Middle Inlet and the Foo Choo Inlet.

The Furneaux Drainage Area, which includes the War Service Land Settlement Furneaux Estate Subdivision and the adjacent Wingaroo Subdivision was proclaimed in 1978.

The Furneaux Drainage Area covers some 39 500 hectares including 5 000 hectares of Crown land unfit for agricultural purposes. There are approximately 150 blocks in the area.

It is estimated that there are 500-600 km of common drains and a similar length of feed drains, including some 130 concrete/stone drops.

The total capital cost incurred to 30 June 1983 amounted to \$26 314.

## PLANNING AUTHORITIES

### Town and Country Planning

#### *Introduction*

Before 1941 governments (both state and federal) had shown little interest in town planning legislation. The war-time Federal Labor Government encouraged activity in this field and in the period 1944-45 four states, including Tasmania, passed legislation with provisions largely based on existing British and New Zealand planning statutes.

Passed in 1944, the Tasmanian *Town and Country Planning Act* applied only to areas which were proclaimed as a result of municipal requests. The Act created the position of Town and Country Planning Commissioner. In 1962 the *Town and Country Planning Act* was repealed and its provisions incorporated in the *Local Government Act 1962* under which the powers of the Commissioner were broadened so that, with the approval of the Minister, he could require any municipality to prepare a planning scheme. The Commissioner for Town and Country Planning functions as a corporation sole under the *Local Government Act 1962* and in respect of his statutory powers is responsible to Parliament.

#### *Functions*

Briefly, the function of the Commissioner is to approve municipal planning schemes and to certify that subdivision proposals are in accordance with these schemes and meet the other requirements as laid down in the *Local Government Act 1962*. Also the Commissioner may require: (i) any municipality to prepare a planning scheme; or (ii) two or more municipalities to co-operate in the preparation of a master planning scheme; he is empowered to specify the completion date for such schemes. If the municipality fails to comply with the Commissioner's requests, then the Commissioner may prepare a scheme, the municipality meeting all preparation costs. A municipality may voluntarily prepare a planning scheme and submit it to the Commissioner for approval. If a scheme, prepared for an area to which a master plan applies, is submitted to the Commissioner for approval then the Commissioner, before giving a decision, must consult the authority which prepared the master plan. The Commissioner is also empowered to deal with objections to any planning scheme, including master plans prepared by a master planning authority.

#### *Legal Procedure for a Planning Scheme*

After the Commissioner gives provisional approval to a planning scheme the municipality must make public the scheme and place a copy in the municipal office for public inspection. Following public notification a three months period is allowed for objections to the scheme by: (i) any owner or occupier of rateable property in the area affected; (ii) health officers as defined in the *Public Health Act 1962*; (iii) the municipality, but only if the scheme has been altered or prepared by the Commissioner. Objections are lodged with the municipality which then forwards the objections, together with a statement of its opinion on them, to the Commissioner for his consideration. The Commissioner hears and determines all the objections except in such cases where he considers the objection sound and the municipality agrees with it. The municipality may request and be entitled to a formal hearing.

If, because of the number and magnitude of objections to a planning scheme, the Commissioner considers it should be substantially modified, he may: (i) recommend that the Minister reject it; or (ii) direct that a specified part of the scheme be revised. In both of these cases another scheme or part scheme has to be prepared and submitted to the Commissioner for provisional approval.

After all objections have been dealt with and the necessary modifications made to the plan, the Commissioner, with the Minister's approval, approves and seals the scheme. The sealed scheme is then publicly notified, placed before both Houses of Parliament and recorded in the central plan register.

### *Scope of Plan*

A town and country planning scheme may deal with the following planning matters: (i) all roads (public and private), streets, footpaths, building lines and land adjacent to foreshores—the plan should cover both alteration to existing roads, streets, etc. and proposed new roads, streets, etc.; (ii) positioning of buildings and the general nature and design of buildings; (iii) preservation of land for afforestation, recreation and open spaces; (iv) preservation of objects of historical or natural interest; (v) sewerage and drainage; (vi) lighting and water supply systems; (vii) specification of the use to which areas may be put; (viii) provision of amenities; (ix) stages of development; and (x) ancillary or consequential works.

### *Subdivision Approvals*

Except where the Commissioner authorises a council or master planning authority to deal with subdivision plans, all such plans submitted to the council must be forwarded to the Commissioner for approval. (At any time, a council's power to authorise subdivision plans without reference to the Commissioner may be withdrawn by him.) When considering subdivision plans the Commissioner may: (i) call for an amendment that either the council requires or the Commissioner considers the principles of town and country planning demand; or (ii) refuse consent to the council approval. The Commissioner is required to ensure that areas for public use are retained along sea and lake shores and rivers and rivulets.

### *Planning Appeal Board*

The Planning Appeal Board consists of a Chairman, who must be a legal practitioner or barrister, and two other members, at least one of whom must be experienced in town and country planning. Persons affected by the decisions of a local government authority in approving or refusing planning approvals may appeal to the Planning Appeal Board. The Board's determination of an appeal must be given effect to by the municipality. Its decision is conclusive and binds all parties to the appeal. Notices of appeal must be lodged with the Clerk to the Commissioner for Town and Country Planning.

### *Regional Planning Authorities*

There are currently two Regional Planning Authorities, one in the north (the Tamar Regional Master Planning Authority) and one in the north-west (the North-West Master Planning Authority). The Southern Metropolitan Planning Authority disbanded in April 1982.

Sections 740 to 749 of the *Local Government Act* 1962 provide for the creation, membership, financial arrangements and statutory duties and responsibilities of regional planning authorities. In general terms the duties and responsibilities of such authorities are to prepare master plans for the whole of the area of its constituent members, and the determination of policies that should be adopted with respect to the use and development of land within the districts of its constituent municipalities having regard to the promotion of the region as an entity in economic, administrative and social terms.

#### **Tamar Regional Master Planning Authority**

The Tamar Regional Master Planning Authority was established in September 1969, following a petition to the State Government by the City of Launceston and the municipalities of Beaconsfield, George Town, Lilydale, Longford and St Leonards. Westbury and Evandale, two essentially rural municipalities, became members in April 1974 to complete the membership of the natural region. In 1978, the Port of Launceston Authority became a constituent member.

The total funding contribution for 1983-84 from Authority members is \$89 800 and \$40 000 from the State Government.

### *Background*

Initially, a consortium of town planning consultants was engaged to produce a preliminary report which was completed in mid-1971. This report formed the basis for the Regional Plan for the area, which was prepared by the Authority's staff. The aim of the constituent councils in the preparation of the Regional Plan was the unified promotion of and development of the Tamar Valley region. The plan was prepared under three principal objectives — planning, environmental and promotional.

The planning objective proposed four principal divisions aligned north to south along the Tamar River and South Esk:

- (i) *Northern Tamar*—centred on the port of Bell Bay with the principal theme being the development of industrial potential and port facilities.
- (ii) *Central Tamar*—extending from Moriarty Reach to Dilston; to be promoted as a recreation and tourist area with the preservation of the existing scenic landscape character.
- (iii) *Southern Tamar*—centred upon Launceston with provision for the retention and further development of the City as the commercial and service centre of the region.
- (iv) *Esk Valley*—rationalisation of transport links and industries, and the promotion of the area's intensive agricultural potential.

The major regional planning policies were completed in 1974, and adopted by the constituent councils. During 1975 the final adopted policies were compiled into a strategic planning policy and submitted for Government approval. These policies were again revised in the 'Tamar Region Plan, 1979'.

### *Regional Planning Scheme*

The Authority's primary role has always been to provide the overall framework for local planning and development in the Tamar Region — 'a guiding hand'. The Authority deals with strategic, statutory and local issue projects and provides advice to councils, government departments and the public.

In May 1983, the Authority embarked on a challenging and most necessary task — to bring all previous strategic, local plans and policies together with the aim of implementing a single planning scheme for the Tamar Region.

At present the Tamar Region has seven Sealed Planning Schemes, six council adopted but unsealed schemes operating on a de facto basis, seven Interim Development Orders (with similar powers as Planning Schemes) and 10 Outline Development Plans which have 'informal' recognition. In addition many urban and rural development areas have no formal planning provisions applying. Existing Schemes, Interim Development Orders and de facto plans all vary in terms of content, format, number and definition of zones, and use provisions (i.e. whether certain uses are allowed in zones as of right, with council permission or are prohibited).

The administration of a proliferation of independent plans and schemes at various stages of adoption and prepared at different times is further confused by three different systems of subdivision approval depending on whether a proposal plan relates to land situated within the City of Launceston, is located in suburban Launceston, fringe urban areas or within a rural township, or, is located in a rural area.

The preparation and adoption of a single Regional Planning Scheme will increase the efficiency of planning procedures and the effectiveness of planning generally in the Tamar Region by providing:

- (i) a single document and set of maps to guide and facilitate development in the Region;
- (ii) certainty in terms of a framework for public and private investment;
- (iii) and most importantly, a streamlined, uniform and much simpler approval process that can be readily understood by developers, investors and the general public.

Steps have been taken towards amending the *Local Government Act* to allow such a scheme to be adopted by councils and the Town and Country Planning Commission.

#### *Membership and Funding of the Authority*

In March 1983, the Authority commissioned an Independent Review of its structure and funding. Subsequent to a sub-committee review of the recommendations of the report and comments received, the Authority resolved:

##### *'Membership of the Authority*

- (i) That authority membership comprise one member from each council and the Port of Launceston Authority, except that the Launceston City Council shall have two representatives.
- (ii) That two members be appointed by State Government from nominations submitted by organisations, representing interests such as primary and secondary industry, commerce, conservation, welfare, or other community organisations. Such members shall be residents of the region.
- (iii) That one member be appointed by the State Government for a period of two years.

##### *Funding of the Authority*

- (iv) That subject to Section 742(2) of the *Local Government Act*, the Authority be empowered to seek contributions, on the agreement of all constituents, on such a basis as it thinks fit.
- (v) That if no agreement is reached, councils be required to contribute to the Authority on an Assessed Annual Value basis.
- (vi) That the Authority be empowered to make arrangements with constituent members and others for payment of work undertaken.

##### *Work Priority*

- (vii) That the Authority give priority in its work programme to the preparation and submission for approval of a Regional Planning Scheme or Master Plan.'

These recommendations were put to the Minister on 2 June 1983. The Minister informed the Authority on 26 July 1983 that he substantially agreed with the recommendations and subject to Cabinet approval, would introduce appropriate amending legislation at the earliest possible date. Amending legislation was expected to be put before Parliament early in 1984.

#### *Other Functions*

In 1978 the Authority was delegated the task of administering rural subdivision controls by the Town and Country Planning Commissioner. The Authority also undertakes major planning studies and plays a key role in promotion activities, representations and submissions for the region.

#### *Recent Projects*

Recently completed planning projects include the development of a multi-residential code for St Leonards, a residential assessment study of the Greater Launceston Area, a recreation study for the Municipality of Evandale and a report on *The Selection of the Regional Refuse Disposal Site at Prospect and its Compatibility with Proposed Recreational Uses*.

Major promotion activities for 1983 included a submission on Bass Strait Shipping entitled *The Empress Replacement — Growth or Stagnation*, a proposal for the restoration and development of the Duck Reach area, a submission to the Parliamentary Joint Committee on Unemployment and a proposal for the development of a Steam Museum at Westbury.



### North-West Master Planning Authority

This Authority was constituted in February 1971 in accordance with provisions of the *Local Government Act* 1962. The eight member local government areas are Latrobe, Kentish, Devonport, Ulverstone, Penguin, Wynyard, Circular Head, and Deloraine (Burnie, a foundation member, withdrew in August 1982). Constituent councils each have two members on the Authority. Finance is obtained from member municipalities in proportion to the annual value of rateable property, with a contribution from the State Government in respect of work undertaken for the Town and Country Planning Commission.

Approximately 12 000 square kilometres in area and containing a population of some 97 000, the Authority's sphere of jurisdiction includes two interstate airports, three marine board port facilities, substantial industrial establishments with international markets, one city and nine principal towns, and prime soil districts supporting forestry, livestock and vegetable production.

The fundamental objective of the Authority is to foster, co-ordinate, and promote the development of the region along sound economic and environmental lines. Under State legislation, it has the responsibility to prepare a statutory master plan for the region.

An initial policy adopted by the Authority was to inhibit further linear expansion along the coast and to focus development inwards from the existing urban nodes, with the rural landscape in between serving as punctuating relief. This has been schematically illustrated in an Outline Development Strategy Map and Report released in November 1974. The Authority has also endorsed the concept of Burnie being the cultural and arts centre for the North-West and West coasts of Tasmania as a regional complement to the major facilities provided in Launceston. In addition, concerted support has been accorded the unique and ambitious 9 000-hectare Dial Regional Sports/Recreation Complex now being implemented in the central location of Penguin.

In 1978 the Authority was delegated the task of administering rural sub-division controls by the Town and Country Planning Commissioner. The Authority is also presently engaged in the promotion of industry, based on the raw materials of the region, and tourism in the area.

### Further References

#### *ABS Publications:*

Local Government Finance, Tasmania (5501.6), annual.

Australian Municipal Information System (AMIS) Manual (1103.0), irregular, latest issue released in December 1980—this Manual describes the AMIS computer data base system which contains a range of data on a comparable basis for all Australian local government areas. Output from the system is available on request.

Public Authority Finance: State and Local Authorities (5504.0), annual.

#### *Other Publications:*

*Report of the Auditor-General and the Statement of Public Accounts* (published annually by the Tasmanian Government Printer, Hobart).

## THE LOCAL GOVERNMENT REORGANIZATION (TAMAR VALLEY) POLL 1983

by Colin Winkler, Lecturer, School of Business, Tasmanian College of Advanced Education, Tasmania.

### *Background*

The immediate origins of this Poll may be traced to the *Report of the Board of Inquiry into Local Government in Launceston and Related Areas* (the Chapman Report) which was tabled in Parliament in June 1979. The Report recommended the abolition of the eight existing councils serving the Tamar Valley and the creation of three new authorities. For a detailed account of the recommendations of the Chapman Report see the 1980 edition of the *Year Book*. As with previous attempts to rationalise local government in Tasmania, the Chapman Report provoked strong opposition from several of the councils concerned, (some of the expenditure on which was later held to be illegal by the Auditor General). However the Government claimed an electoral mandate to institute changes, and introduced (after some delays and a study by a Liaison Committee of northern Parliamentarians) the *Local Government Reorganisation (Tamar Valley) Bill* 1981. Passage of this Bill through Parliament was curtailed in the Legislative Council: the Upper House established a Select Committee under the chairmanship of Mr Shaw to investigate the changes proposed in the Bill. When the Select Committee was re-constituted in October 1982, the terms of reference required yet another evaluation of the need for rationalisation amongst the Tamar Valley councils and, in the event that the Committee recommended rationalisation, it was further directed *inter alia* to assess whether cost benefit analysis and/or a poll of electors were necessary and practical prior to implementation of such recommendations (Dr Chapman had already maintained that cost benefit study was impractical). In ultimately finding that there was a *prima facie* case for rationalisation, and in its consequential findings with respect to the preconditions of implementation, the Select Committee initiated a chain of events which culminated in the Government's decision to conduct the Poll.

### *The Proposals*

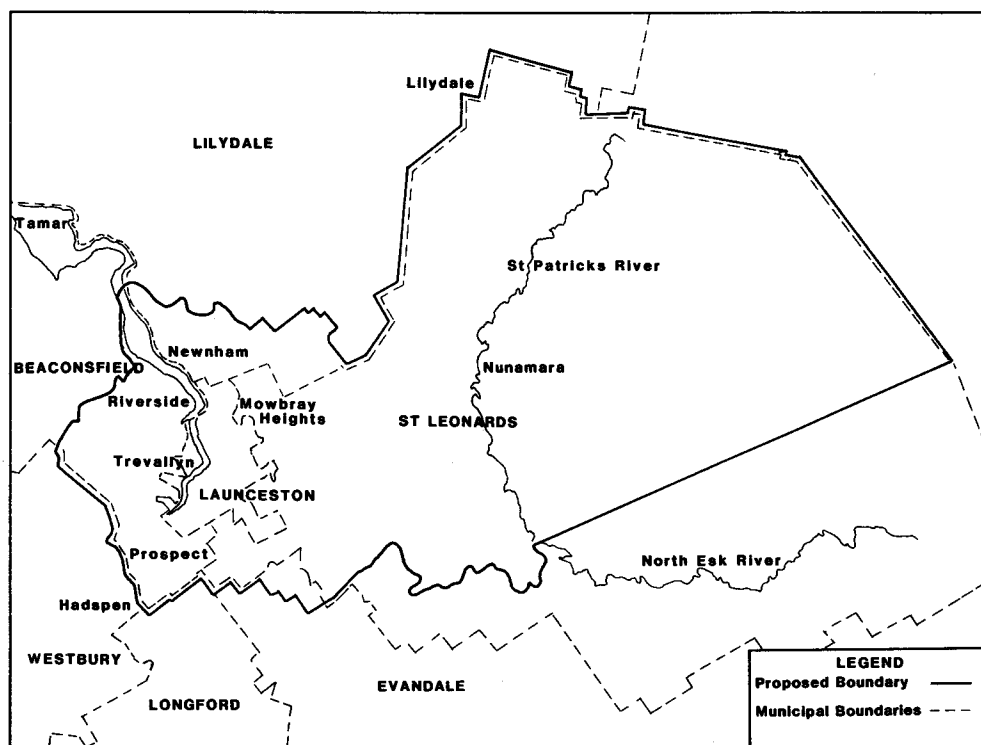
The proposed reorganisation involved the following localities being brought under the control of one council authority:

- (i) From the Beaconsfield municipality; Trevallyn, West Riverside, Riverside, North Riverside (to Cormiston Creek).
- (ii) From the Evandale municipality; Franklin Village, Relbia Road (to Jingers Creek).
- (iii) From the Lilydale municipality; Mowbray, Newnham, Mayfield, Alanvale, Rocherlea (to Barnards Creek).
- (iv) From the St Leonards municipality; Mowbray, Vermont, Ravenswood, Waverley, Punchbowl, South Launceston, Norwood, Youngtown, Franklin Village, Kings Meadows, West Launceston, Prospect and all the remainder of the municipality excepting east of Corra Linn which was proposed to be transferred to the Evandale municipality.
- (v) From the Westbury municipality; Prospect, Prospect Vale, Summerhill (to Beams Hollow, between Pateena Road and Hadspen).
- (vi) All of the existing area controlled by the Launceston City Council.

The proposed Greater Launceston area was to be divided (following the Select Committee's recommendations) into five wards, each impinging on the City centre, and with side boundaries radiating outward. It was proposed that each ward would elect three aldermen to the new authority.

The proposed boundary changes are illustrated in the map on the next page:

## PROPOSED CITY OF LAUNCESTON BOUNDARIES



Proposed Boundaries Under Amalgamation

*The Campaigns For and Against Amalgamation*

The civic debate over the reorganisation proposals generated numerous issues, some legitimate, other spurious, some important, others of petty concern. The supporters based their case on the common dogmas of metropolitan reform: the inability of individual councils to cope with area-wide problems; the stifling effects of the existing system on the economic progress of the area as demonstrated by the Tamar Valley becoming 'the poor cousin in Tasmania ... (struggling) for years for justice on our road spending'; the need for overall guidance and direction in planning the area's future; and economies of scale producing greater efficiency in both administration and operations. The opponents of reorganisation denied most of the problems and asserted that only minor adjustments were necessary for those that did exist; they stressed the standard 'home rule' argument — 'we are used to personal caring councils where people through their representatives control their own affairs', and raised the spectre of higher rates, an issue with strong voter impact. Any mention of new or increased taxes is a favourite theme of those opposing governmental innovation, a theme the average voter understands.

The campaign was a somewhat curious phenomenon characterised more by inactivity and emotion than by vigour and rigour. Such organised support as there was for amalgamation (as, for example, on the part of the United Launceston Citizens' Committee) was generally aligned with the stand taken by the Launceston City Council which had

retained a Hobart-based public relations firm to handle its campaign, whilst opposition support (such as the Vote No Committee) typically followed the line taken by the St Leonards Council. As the campaign progressed, some efforts were made by both camps to enlist the various civic and interest groups and individual citizens in their respective causes. However, generally participation was limited to formal endorsement or condemnation of the proposals. Only a minority of these groups and individuals took an active part in the campaign. For most of them, the issues were too far removed from their main interests to elicit active involvement and the commitment of scarce resources — the Municipal Officers' Association was a clear exception here. Yet if the endorsement technique is strategically utilized it can be highly useful when the matter to be decided at a poll is complex and difficult to clarify for the average voter. In such cases as the amalgamation, an appeal to 'authority' — to the collective judgment of organisations as expressed by their leaders — often serves as a substitute for personal understanding. Certainly if the confusion over the proposals which was evident at the few public meetings can be taken as a guide to the level of personal understanding of the issues at stake, then campaign organisers would have done well to consider alternative tactics.

The main channel of publicity for the campaign overall was the regional daily newspaper, *The Examiner*, the news columns of which covered all phases of the campaign while the editorials were openly sympathetic to the amalgamation. The Warden of St Leonards, Councillor Brookes, dissatisfied with what he referred to as 'a biased media', issued a four page news-sheet outlining the case against amalgamation, and endeavouring to refute some of the claims made by supporters of the reorganisation. A limited range of other factional material appeared, such as the leaflet issued by the United Launceston Citizens' Committee, but virtually all material was characterised by emotional polemics rather than objective, rational presentation. The pattern of claim and counter-claim at times became somewhat overheated, prompting the former President of the Municipal Association of Tasmania, Councillor Cameron of Evandale, to suggest a 'cooling off' period in the debate — a suggestion which may well have increased the objectivity of both supporters and opponents of the reorganisation. Even the leaflet and press notice produced by the State Electoral Office offered limited objectivity: whilst providing a catalogue of the localities to be 'hived off' from each municipality, and the above map showing the consequential boundary changes, the *Yes* and *No* cases were presented in the forms arranged by the Municipal Association of Tasmania — forms which merely reiterated the claims previously espoused by the protagonists. In the case of the leaflet, the intention had been that it should be distributed by the six councils involved in the proposed reorganisation. However the Launceston City Council decided not to deliver the leaflet to ratepayers but simply made copies available at the Town Hall: as the Mayor of Launceston, Alderman Wing commented, '(it) contained serious misrepresentations' of the opposition case.

#### *The Results of the Poll*

The Poll (non-compulsory) was held on 17 December 1983, and resulted in the proposals being rejected by electors in four of the six municipalities, although 55 per cent of votes cast were in favour of the Greater Launceston concept. The Government had decreed that electors in at least four municipalities must vote in favour of the proposals before amalgamation would be implemented, and accordingly the Premier, Mr Gray, confirmed that on the basis of the Poll, amalgamation would not proceed. (The Select Committee had recommended the Poll 'to provide guidelines for the Government'.)

The results of the Poll by municipality and polling station are summarized in the table on the next page:

## Results of the Poll by Municipality and Polling Stations

Municipality and polling station		Votes		Municipality and polling station		Votes	
		Yes	No			Yes	No
<b>Launceston</b>				<b>Nabowla Hall</b> .....			
Town Hall .....		387	24	Karoola F/C rooms .....		21	20
Quadrant Mall .....		255	29	Postal .....		32	86
The Mall .....		420	50			24	18
217 Invermay Road .....		329	64	Total formal votes,			
383 Invermay Road .....		430	58	Lilydale .....	1 159	1 260	
Beatty Street .....		171	34	Percentage .....	48%	52%	
Landale Street .....		143	29	Informal 15			
MTT Office .....		225	18	<b>Westbury</b>			
St Mark's Hall .....		416	55	Westbury Chambers .....		49	613
Hobart Road .....		397	57	Exton .....		10	40
Cosgrove Park .....		93	17	Birrallce .....		1	28
Mulgrave Street .....		257	36	Frankford .....		4	46
David Street .....		664	60	Selbourne .....		3	23
High Street .....		336	20	Rosevale .....		1	28
Windmill Hill .....		222	9	Hagley .....		15	132
Elphin Road .....		247	18	Carrick .....		31	122
East Launceston .....		294	15	Hadspen .....		79	177
Kmart .....		250	24	Prospect Vale .....		152	383
Trevallyn .....		571	26	Bracknell .....		12	134
Brougham Street .....		729	49	Whitemore .....		18	90
Hardwicke Street .....		244	16	Postal .....		9	38
Coats Paton .....		113	5	Total formal votes,			
Summerhill .....		429	53	Westbury .....	384	1 854	
Postal .....		168	14	Percentage .....	17%	83%	
Total formal votes,				Informal 1			
Launceston .....	7 790	780		<b>Beaconsfield</b>			
Percentage .....	91%	9%		Kelso .....		33	40
Informal 38				Riverside .....		649	698
<b>St Leonards</b>				Riverside West .....		337	359
Norwood .....		247	272	Riverside North .....		143	203
Youngtown .....		158	308	Legana .....		160	292
Punchbowl .....		90	162	Exeter .....		138	387
St Catherine's Hall .....		256	275	Gravelly Beach .....		87	153
Bass Highway .....		71	70	Glengarry .....		8	57
Alma/Chestnut .....		79	215	Sidmouth .....		72	159
Kings Meadow .....		235	364	Beaconsfield .....		75	408
Council Chambers .....		195	421	Sandy Beach (Ilfraville) .....		81	267
North Esk .....		3	16	Postal .....		15	43
White Hills .....		17	33	Total formal votes			
St Leonards School .....		58	387	Beaconsfield .....	1 798	3 070	
Waverley .....		13	71	Percentage .....	37%	63%	
Tasman Hwy .....		50	265	Informal 6			
Myrtle Park .....		2	38	<b>Evandale</b>			
Nunamara .....		21	67	Evandale .....		158	118
Ravenswood .....		94	286	Franklin Village .....		49	52
R'wood Community .....		67	240	Nile .....		15	9
Postal .....		29	76	Deddington Hall .....		3	7
Total formal votes,				Postal .....		2	2
St Leonards .....	1 685	3 566		Total formal votes,			
Percentage .....	32%	68%		Evandale .....	227	188	
Informal 5				Percentage .....	55%	45%	
<b>Lilydale</b>				Informal 0			
Archers Arms .....		569	547	Total formal votes .....	13 043	10 718	
George Town Road .....		230	279	Percentage .....	54.89%	45.11%	
Dilston Hall .....		110	95	Total informal 65			
Lilydale Office .....		142	181				
Lebrinna Hall .....		31	34				

An unusual feature of the Poll was that 49% of those eligible to vote did so; almost twice the normal vote in municipal elections. The proportion of votes cast to the number of eligible voters in each municipality is indicated in the table below:

Proportion of Votes Cast to Number of Eligible Voters by Municipality

Launceston .....	52%	Westbury .....	70%
St Leonards .....	48%	Beaconsfield .....	58
Lilydale .....	45%	Evandale .....	29%

Analysis of voting in the localities which it was proposed would be amalgamated into Greater Launceston (assuming that votes were cast by eligible voters in their own locality) indicates that some of the major population centres were fairly evenly divided on the reorganisation proposals. In the Beaconsfield municipality, for example, the three Riverside polling stations returned 47% of votes in favour of amalgamation; in the Lilydale municipality, the two suburban stations returned 49% in favour; in the St Leonards municipality, the two Norwood stations returned 48% in favour (despite expectations that this area would show strong support for the proposals). Against these relatively even results, the returns from Prospect Vale in the Westbury municipality showed 72% against reorganisation, and the Youngtown-Punchbowl-Kingsmeadows area of the St Leonards municipality returned a 65% vote against the proposals.

There was considerable criticism both before and after the Poll, of the way in which the Government framed the conditions for the Poll. Certainly in attaching equal weight to the overall vote in each municipality, despite the population disparities, the conditions favoured the opposition to amalgamation. However the equal weighting recognised the *de jure* equality of each municipality in much the same way as the composition of the Federal Senate acknowledges the equal rights of the States. Had the municipalities been allocated a voting weight in proportion to, say, their respective numbers of eligible voters, the result on the primary criterion would have paralleled the overall majority vote in favour of the reorganisation.

Given the failure of the proposals on the basis of the 'municipalities votes' and the concomitant majority support for the reorganisation, it would appear that both the Government and the two factions share the responsibility for what was an unsatisfactory resolution. The *structure* of the Poll should, perhaps, have sought to encompass a *set* of criteria which would have more equitably reflected the wishes of the voters; whether by weighting votes by municipality, by giving cognisance to the expressed wishes of voters in those localities which it was proposed should be amalgamated, by a compulsory vote, or by some other means. The *objectivity* of the cases for and against amalgamation should (in the interests of the voters) have been heightened by all parties, rather than allowing the campaign to degenerate into a 'grabbag' of emotional appeals. The *strategy and tactics* of each faction could well have been more carefully considered as, subjectivity aside, the timing of publicity and the choice of media could have received greater attention, again in the interests of ensuring that voters were more completely equipped to make a reasoned choice.

#### Aftermath

In commenting on the result of the Poll the Premier, Mr Gray, who had publicly supported the creation of a Greater Launceston, drew attention to the consequences of the rejection of the proposals for the regional services provided by the Launceston City Council. The Premier indicated the inequities involved in funding such services by one authority when their cost should be borne by the region, and in emphasizing that the State Government is not in a position to subsidize these services beyond current levels, made it clear that the 'user pays' principle must apply. Within a week of the Poll, at the initiative of the Mayor of Launceston, Alderman Wing, a meeting of the Wardens of the Tamar Valley councils was convened to discuss the equitable distribution of the costs of such regional facilities, which the Mayor estimated at 'about \$1 million per annum'. So far, no generally acceptable scheme to this end has emerged, and the State Government has

indicated that it will assist the Launceston City Council in finding ways of overcoming its problems as the regional centre, whilst reiterating that further financial assistance is impossible.

The Opposition spokesman on Local Government, Mr Aird, indicated shortly after the Poll that, in Government, his Party would implement some form of local government rationalisation in the Tamar region, and subsequently made it public that the Opposition will consult members of the Legislative Council on the possible introduction of a private member's bill designed to effect municipal amalgamations in the Tamar region. The Chairman of the Legislative Council Select Committee on the reorganisation, Mr Shaw, emphasized that the rejection of the proposals by four municipalities should not be taken as an indication that 'things are all right with local government. They are not,' and went on to suggest that if the 'bickering' between the Tamar councils continues unabated, State Government intervention will be necessary.

### *Prospects*

As noted in the discussion of the results of the Poll, a more clear cut result may well have been obtained had closer attention been paid to structure, objectivity, and strategy and tactics; certainly a more democratic result, one way or the other, which would have provided the Government with the guidelines envisaged by the Select Committee.

The background to the Poll, the campaigns, the Poll itself, and its immediate repercussions, all highlight the need to distinguish folklore from fact in any future initiatives involving local government rationalisation. In the past, calls of inquiries have, at least by implication, expected the inquiries to rest on what are little more than folklore assumptions; future efforts must be directed at clarifying what is assumption and what is fact. Some of the typical issues which need to be considered are reflected in the following questions:

1. *Must the core City of Launceston 'expand or die'?*

The assumption which often seems to be made is that a healthy stability is impossible, based on the idea that the City of Launceston will become socially and economically obsolescent if it has no expansion space within its boundaries. The corollary is that, given growth in the entire Tamar region, the core City must grow at a corresponding rate, growth being measured by population. This argument is implicit in many of the views put forward during the campaign by those whom, one suspects, have a financial stake in expansion, and derives from the tendency to associate population growth with 'progress'. It overlooks the real challenge in municipal policy today, which is away from the 'ringworm' approach to urbanisation — decay at the centre and new growth at the periphery — and toward socio-economically innovative approaches to the core City, as typifies many of the European cities of comparable size but of much greater age.

2. *Are efficiency and economy the highest values held for local government by the ratepayer?*

Those dedicated to these values never seem to consider that the suburban businessman or homeowner may value other things more highly; in particular, access to decision making centres and representativeness of local government. They probably see 'their' fringe area council as more likely to voice values and business goals compatible with their own, unlike a centralised bureaucracy which is seen as sympathetic to core City values — the 'Brisbane Street Baron' syndrome which characterised much of the opposition case to amalgamation. Efficiency and economy are probably amongst the suburbanites' lesser concerns; to him, other things may have a far higher priority. Cynically, perhaps he *expects* local government to be relatively inefficient, and since, to him, it is going to be inefficient no matter whether decentralised or centralised, he wants a voice in it.



3. *Are ratepayers prepared to accept area-wide planning if a feasible way can be found to administer it?*

The ratepayer may well accept, quite readily, a programme to improve a sewage treatment plant, even if it involves financial cooperation between municipalities. However he may see no value in generalised regional planning *per se*, since he is secure in his own immediate locality and may be unconcerned with the problems of the wider region. The rather chequered history of the Tamar Regional Master Planning Authority can only serve to reinforce what may well be the extent of the typical ratepayer's view that area-wide planning is 'doomed to failure'.

4. *Is there a 'Greater Launceston interest'?*

The campaign supporting amalgamation suggested that there was a need to present the Greater Launceston point-of-view to Parliament. But *is* there such a point-of-view? The area comprises a collection of people who, for economic and other reasons, live in close geographic proximity, each wanting to pay no more of the social cost of the core City than he must. To each ratepayer there is, no doubt, a water supply problem or a road problem — in so far as such problems affect him tangibly: there is a Norwood interest, a Newnham interest, and so on. But is there a Greater Launceston interest? The answer is 'yes' to professional planners, to social workers, to civil engineers, but what of the typical ratepayer? His own concerns make his views parochial, and to him, the only realistic Greater Launceston policies will be those that recognise and accept that parochialism.

An harmonic Greater Launceston public interest is often portrayed in study reports and in public debate as a reality for which the whole community should strive. However the Greater Launceston area is a maze of conflicting values, goals, and activities which tend to manifest themselves through (and are perhaps exacerbated by) the existing council structure. The governing body of a unified Greater Launceston would contain as many different pressures and cross-pressures as are to be found in State Parliament, and its operations probably would be no more harmonious. A Greater Launceston government would be strife-torn and its major decisions agonisingly made. It might encourage better coordinated policies; it would not diminish conflict.

At the same time, it must be recognised that there are dangers in over-romanticising: arguments based on the superior democratic qualities of the suburban council are full of pitfalls. Small scale government is often routine, conservative government; men of talent will leave it to seek greater opportunities; elaborate interventions by those at the State Government level are sometimes needed to save local governments from themselves. The numerous inquiries have clearly established that there *are* problems in the Tamar region, and as it appears to be improbable that any initiative to resolve those problems will originate with the councils themselves, the State Government must determine what approach is to be taken. In the short-term, if priority is to be attached to the adjustment of the inequities which arise from the provision of regional services by the Launceston City Council, then there would appear to be scope for:

- (i) The State Government to negotiate with the Commonwealth with a view to incorporating the criterion of regional services in the allocation of the minimum of 30 per cent of local government's proportion of the tax sharing arrangements which is customarily allocated on a population basis;
- (ii) The State Grants Commission to extend its definition of horizontal equalisation to include equalisation for regional services;
- (iii) The State Government to utilize either existing powers or powers under new legislation to differentiate amongst municipalities in respect of loan raisings.

Beyond this problem of inequities, there appears to be little that the present Government is able to do on the broader question of rationalisation; its stance toward the Poll

was such that it is now committed to the *status quo* — unless, of course, new evidence is brought forward which permits the issue to be reopened. It is to be hoped that it will not be thought necessary to constitute any further committees of inquiry — whilst such committees are part of the ritual of government, they are not the most effective or economical way of gathering information on which to base decisions.

## CHAPTER 6

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## Chapter 6

### DEMOGRAPHY

#### POPULATION

#### Introduction

##### *Population Censuses*

Censuses of the population were conducted by the State in 1841, 1847, 1851, 1857, 1861, 1870, 1881, 1891 and 1901; the Australian Statistician became responsible for censuses with the establishment of the Commonwealth Bureau of Census and Statistics (now the Australian Bureau of Statistics) and conducted censuses in 1911, 1921, 1933, 1947, 1954, 1961, 1966, 1971, 1976 and 1981. Some details from the 1981 census of population and housing have been included in this chapter. Further information can be obtained by contacting the Hobart Office of the ABS.

##### *Census Post-Enumeration Surveys*

Post-enumeration surveys, designed to measure the degree of error, were conducted after the 1971, 1976 and 1981 censuses. Net under-enumeration (under-count) was derived by comparing results from the Census and post-enumeration survey for the same individuals and identifying omissions and duplications in the Census. Under-enumeration rates for Tasmania and Australia are given below:

**Census Under-enumeration Rates**

<i>Area</i>	<i>1971</i>	<i>1976</i>	<i>1981</i>
Tasmania .....	0.36	1.12	0.97
Australia .....	1.35	2.71	1.86

##### *Estimated Resident Population*

From 30 June 1981 the ABS adopted the 'usual residence' concept as the basis of population estimation. Estimates on this basis are referred to as estimated resident population. Estimated resident population figures have been calculated from 1971 onwards for the State. Resident population for local government areas have been calculated from 1976 onwards.

The estimated resident population for Tasmania in census years is derived from population census counts as follows:

- (a) Census count (actual location) *plus* Tasmanian residents absent interstate *less* interstate visitors to Tasmania *less* overseas visitors *equals* census count, place of usual resident, Tasmania.
- (b) Census count, place of usual residence was then adjusted for under-enumeration (determined by the post-enumeration survey) and Tasmanian visitors temporarily overseas added in to give the *estimated resident population* for the State.

Intercensal estimates are prepared by applying vital and migration statistics to census based data. Natural increase (excess of births and deaths) and net migration (excess of arrivals over departures) are applied to the census based estimated resident population to produce an ongoing series. After each census the estimates for the newly completed intercensal period are revised to adjust for the difference between the new census based result and the comparable estimate.

### Comparison With Other States

The following table compares the Tasmanian population at censuses from 1901 with that of other states and territories (full-blood Aboriginals are included from 1966):

Australia: Census Populations of States and Territories  
(<sup>'000 Persons</sup>)

State or territory	1901	1933	1947	1954	1966	1971 (a)	1976 (a)	1981 (a)
NSW .....	1 355	2 601	2 985	3 424	4 238	4 726	4 960	5 235
Victoria .....	1 201	1 820	2 055	2 452	3 220	3 601	3 810	3 947
Queensland .....	498	947	1 106	1 318	1 674	1 852	2 092	2 345
WA .....	184	439	502	640	848	1 054	1 178	1 319
SA .....	359	581	646	797	1 095	1 200	1 274	1 300
Tasmania .....	172	228	257	309	371	398	412	427
NT .....	5	5	11	17	57	86	98	123
ACT (b) .....	—	9	17	30	96	151	208	228
Australia .....	3 774	6 630	7 579	8 987	11 599	13 067	14 033	14 923

(a) Estimated resident population. Census figures up to 1966 are as recorded.

(b) Part of NSW prior to 1911.

The average annual (compound) increase in population for Tasmania from 1976 to 1981 (based on adjusted population) was 0.73 per cent. The corresponding Australian annual rate of population increase was 1.27 per cent.

### Estimated Resident Population

#### Population in Local Government Areas

The next table shows estimated resident population in local government areas, statistical divisions, sub-divisions and districts for the years 1976-83.

Population in Local Government Areas at 30 June

Local government area Statistical Subdivision Statistical Division Statistical district		1976r	1981r	1982	1983	Annual average rate of change	
						1976 to 1981	1981 to 1983
						(per cent) (a)	(per cent) (a)
Hobart (H) .....		50 190	47 890	47 700	47 590	-0.93	-0.31
Glenorchy (H) .....		43 450	41 860	41 670	41 510	-0.74	-0.42
Clarence (H) .....		43 120	45 550	45 800	46 010	+1.10	+0.50
Brighton (H) (S) ....		5 040	9 640	10 540	11 070	+13.85	+7.16
Kingborough (H) (S) ....		14 280	17 510	17 950	18 400	+4.16	+2.51
New Norfolk (H) (S) ....		10 210	9 800	9 760	9 730	-0.82	-0.36
Sorell (H) (S) ....		4 490	5 420	5 590	5 740	+3.84	+2.91
Bothwell (S) .....		800	730	720	710	-1.81	-1.38
Bruny (S) .....		330	390	390	390	+3.40	—
Esperance (S) .....		3 240	3 170	3 150	3 140	-0.44	-0.47
Glamorgan (S) .....		1 330	1 490	1 500	1 520	+2.30	+1.00
Green Ponds (S) .....		850	1 000	1 020	1 040	+3.30	+1.98
Hamilton (S) .....		3 490	2 570	2 520	2 500	-5.94	-1.37
Huon (S) .....		4 960	4 860	4 840	4 840	-0.41	-0.21
Oatlands (S) .....		2 270	2 070	2 050	2 020	-1.83	-1.22
Port Cygnet (S) .....		2 140	2 290	2 300	2 340	+1.36	+1.09
Richmond (S) .....		1 710	1 830	1 860	1 900	+1.37	+1.89
Spring Bay (S) .....		1 840	1 910	1 930	1 940	+0.75	+0.78
Tasman (S) .....		970	1 080	1 100	1 120	+2.17	+1.84
HOBERT STAT DIV		164 400	171 110	172 490	173 650	+0.80	+0.74
SOUTHERN STAT DIVISION		30 310	29 950	29 900	29 860	-0.24	-0.15

continued next page

## Population in Local Government Areas at 30 June—continued

Local government area Statistical Subdivision Statistical Division Statistical district	1976r	1981r	1982	1983	Annual average rate of change	
					1976 to 1981 (per cent) (a)	1981 to 1983 (per cent) (a)
Launceston .....	33 640	31 980	31 770	31 590	-1.01	-0.61
Beaconsfield .....	12 960	14 150	14 340	14 520	+1.77	+1.30
Deloraine .....	4 960	5 020	5 030	5 060	+0.24	+0.40
Evandale .....	1 620	1 960	2 000	2 060	+3.88	+2.52
George Town .....	6 760	7 310	7 310	7 290	+1.58	-0.14
Lilydale .....	8 970	9 070	9 090	9 180	+0.22	+0.60
Longford .....	5 540	5 810	5 850	5 910	+0.96	+0.86
St Leonards .....	18 940	20 710	20 910	21 090	+1.80	+0.91
Westbury .....	5 660	6 670	6 820	6 960	+3.34	+2.15
Tamar Stat Subdivision	99 050	102 680	103 120	103 660	+0.72	+0.48
Campbell Town .....	1 630	1 540	1 530	1 530	-1.13	-0.33
Fingal .....	2 980	2 920	2 920	2 890	-0.41	-0.52
Flinders .....	1 010	1 090	1 100	1 110	+1.54	+0.91
Portland .....	1 640	2 130	2 200	2 300	+5.37	+3.91
Ringarooma .....	2 300	2 330	2 350	2 360	+0.26	+0.64
Ross .....	580	530	520	500	-1.79	-2.87
Scottsdale .....	4 040	4 350	4 410	4 460	+1.49	+1.26
North Eastern Stat Subdivision	14 180	14 890	15 030	15 150	+0.98	+0.87
NORTHERN STAT DIVISION	113 230	117 570	118 150	118 810	+0.76	+0.53
Burnie .....	20 100	20 400	20 480	20 560	+0.30	+0.39
Circular Head .....	7 930	7 910	7 910	7 930	-0.05	+0.13
Devonport .....	22 210	23 930	24 200	24 410	+1.50	+1.00
Kentish .....	4 140	4 350	4 390	4 420	+0.99	+0.80
King Island .....	2 760	2 720	2 720	2 680	-0.29	-0.74
Latrobe .....	5 540	5 630	5 660	5 700	+0.32	+0.62
Penguin .....	5 140	5 270	5 290	5 330	+0.50	+0.57
Ulverstone .....	12 330	13 110	13 260	13 390	+1.23	+1.06
Wynyard .....	11 650	12 120	12 200	12 280	+0.79	+0.66
North Western Stat Subdivision	91 800	95 440	96 110	96 700	+0.78	+0.66
Gormanstown .....	390	130	110	110	-19.73	-8.01
Queenstown .....	4 680	3 740	3 700	3 680	-4.39	-0.81
Strahan .....	460	440	440	450	-0.89	+1.13
Waratah .....	2 020	2 150	2 180	2 200	+1.26	+1.16
Zeehan .....	5 010	6 670	6 720	6 740	+5.89	+0.52
Western Stat Subdivision	12 560	13 130	13 150	13 180	+0.89	+0.19
MERSEY-LYELL STAT DIVISION	104 360	108 570	109 260	109 880	+0.79	+0.60
TASMANIA	412 300	427 200	429 800	432 200	+0.71	+0.58
Launceston Statistical District .....	84 090	86 810	87 180	87 640	+0.64	+0.48
Burnie-Devonport Statistical District (b) .....	(b)	72 890	73 450	73 950	(b)	+0.72

(a) Average annual rate of increase (+) or decrease (-) in population over the five year period 1976 to 1981 and the two year period 1981 to 1983.

(b) Area not delineated prior to the census of 30 June 1981.

### Population Distribution

Compared to other parts of the world, Tasmania, like the other Australian States, is sparsely populated. Its density of only six persons per square kilometre compares for example with that of England of 356 (June 1982). Although its population of 429 800 is the lowest of all the Australian states, only Victoria and New South Wales have populations more dense than Tasmania. Nevertheless Tasmania, as shown in the table below has the most decentralised population of all the states.

Population Distribution, All States, 30 June 1982

State	Population		Proportion of total in capital city statistical division
	Total	Capital city statistical division	
	'000	'000	%
NSW .....	5307.9	3310.5	62.37
Victoria .....	3994.1	2836.8	71.02
Queensland .....	2419.6	1124.2	46.46
WA .....	1336.9	948.9	70.98
SA .....	1328.7	960.0	72.25
Tasmania .....	429.8	172.5	40.13

### Age Distribution of the Population

The following table shows the age distribution of the estimated resident population at 30 June 1976, 1981 and 1982:

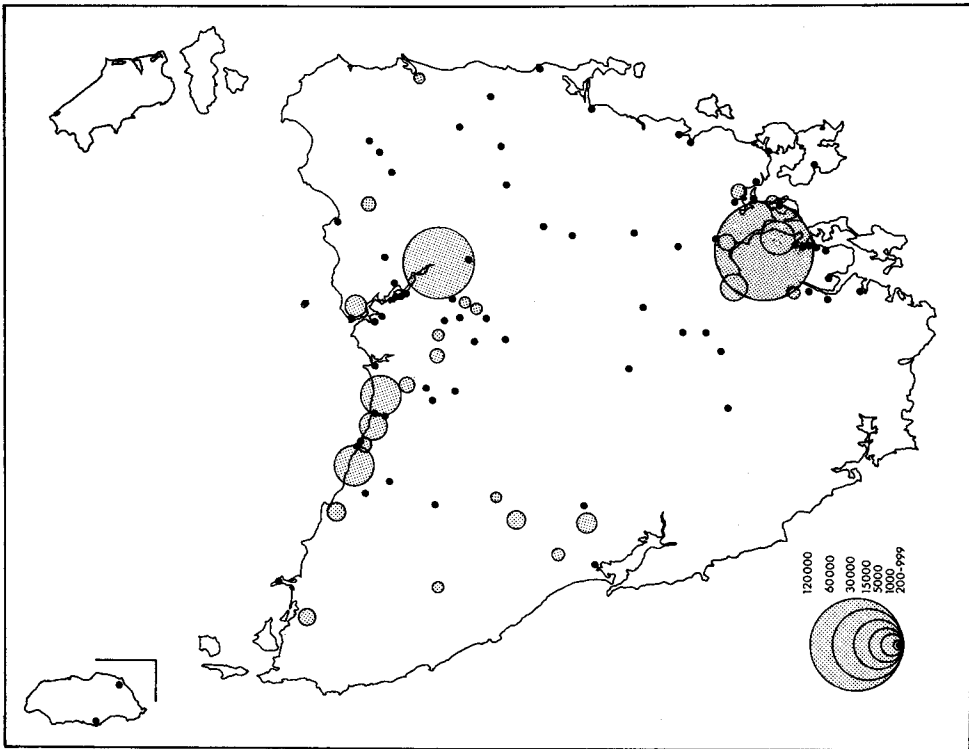
Age Distribution of the Estimated Resident Population

Age (years)	30 June 1976		30 June 1981		30 June 1982			
	Persons	Pro- portion per cent	Persons	Pro- portion per cent	Males	Females	Persons	Pro- portion per cent
0- 4 .....	36 920	9.0	33 990	8.0	17 450	16 880	34 330	8.0
5- 9 .....	39 610	9.6	37 110	8.7	18 170	17 400	35 570	8.3
10-14 .....	40 310	9.8	39 540	9.3	20 330	19 670	40 000	9.3
15-19 .....	39 460	9.6	39 060	9.1	19 190	18 800	37 990	8.8
20-24 .....	34 060	8.3	37 350	8.7	18 890	18 920	37 810	8.8
25-29 .....	33 320	8.1	34 460	8.1	17 430	17 300	34 730	8.1
30-34 .....	26 840	6.5	33 380	7.8	16 860	16 220	33 080	7.7
35-39 .....	23 630	5.7	26 750	6.3	14 570	14 180	28 750	6.7
40-44 .....	20 780	5.0	23 030	5.4	12 040	11 570	23 610	5.5
45-49 .....	21 960	5.3	20 090	4.7	10 180	9 900	20 080	4.7
50-54 .....	22 450	5.4	21 250	5.0	10 770	10 270	21 040	4.9
55-59 .....	19 280	4.7	20 850	4.9	10 440	10 310	20 750	4.8
60-64 .....	17 460	4.2	17 990	4.2	8 580	9 600	18 180	4.2
65-69 .....	13 870	3.4	15 880	3.7	7 690	8 510	16 200	3.8
70+ .....	22 350	5.4	26 570	6.2	11 050	16 580	27 620	6.4
Total	412 300	100.0	427 300	100.0	213 630	216 120	429 750	100.0
18 years and over	270 560	65.6	293 550	68.7	146 410	151 200	297 610	69.3
Pensionable age (a)	45 119	10.9	51 880	12.1	18 740	34 690	53 420	12.4

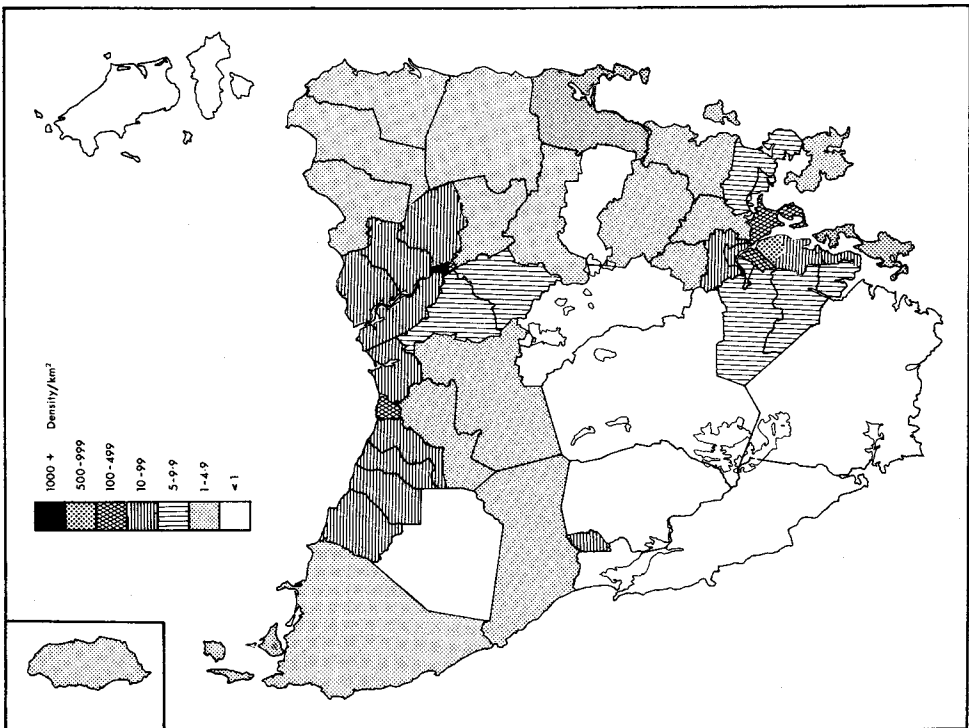
(a) Males 65 years and over. Females 60 years and over.



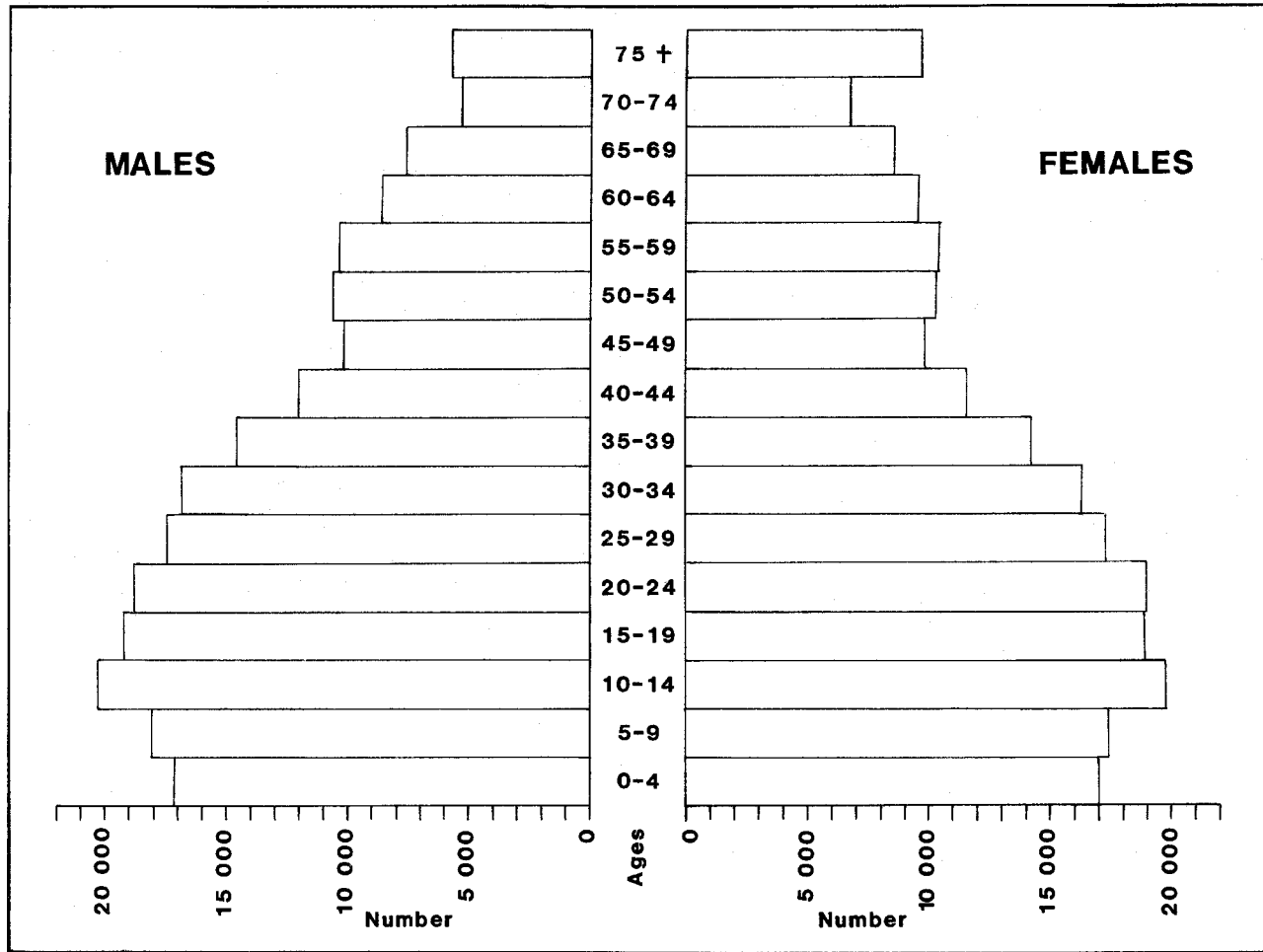
Populations of Urban Centres



Population Density: Tasmanian Municipalities



Age Structure, Tasmania, 30 June 1982



### Interstate Arrivals and Departures

From 1 January 1979 the Tasmanian Office of the Australian Bureau of Statistics ceased collection of its series of recorded interstate and overseas arrivals and departures. The Tasmanian State Department of Tourism has developed a series, commencing from the September quarter of 1971, paralleling the Bureau's collection but with a different basis. It is the Department of Tourism's figures which are published in this issue.

The table below shows recorded arrivals and departures of interstate passengers travelling either by air or sea. The following persons are *not* included: passengers under three years of age, accompanied by an adult; passengers travelling on chartered flights with minor carriers; passengers travelling on private or VIP flights; and passengers arriving from or departing for overseas.

Recorded Interstate Arrivals and Departures: Tasmania  
(Source: Department of Tourism)

Year	Arrivals	Departures	Quarter ending	Arrivals	Departures
1976 .....	509 356	507 384	1982-March .....	166 818	183 812
1977 .....	538 665	530 535	June .....	139 738	147 414
1978 .....	557 275	559 293	September .....	124 444	123 903
1979 .....	576 050	574 840	December .....	146 114	126 716
1980 .....	590 680	591 509	1983-March .....	158 225	171 378
1981 .....	582 644	586 175	June .....	127 461	135 560
1982 .....	577 114	581 845	September .....	124 289	121 008

### Populations Centred on Hobart, Launceston and Burnie-Devonport

Populations centred on Hobart, Launceston and Burnie-Devonport are compiled and published on a two boundary basis. For Hobart the two boundary concept was introduced in 1966, Launceston in 1976 and Burnie-Devonport in 1981. The boundaries are:

- (i) A fixed outer boundary to enclose expected urban growth over the next 20 to 30 years;
  - (a) The Hobart Statistical Division comprises the cities of Hobart and Glenorchy, Clarence municipality and parts of Kingborough, New Norfolk, Brighton and Sorell municipalities;
  - (b) The Launceston Statistical District comprises the City of Launceston and parts of seven neighbouring municipalities;
  - (c) The Burnie-Devonport Statistical District comprises the City of Devonport and parts of other municipalities along the North West Coast.

Maps of these areas are contained in Chapter 2.

- (ii) A moving inner boundary which moves out towards the fixed outer boundary as urban growth occurs;
  - (a) Urban Hobart comprises the continuous urban portions of the cities of Hobart and Glenorchy and of the municipalities of Clarence and Kingborough. It stretches from Granton in the north to Taroona in the south on the western shore and on the eastern shore from Risdon Vale southward to Rokeby;
  - (b) Urban Launceston is the area of continuous urban development centred on Launceston City and includes parts of the municipalities of Beaconsfield, Westbury, Evandale, St Leonards and Lilydale;
  - (c) Urban Burnie is the continuous area of development around the town centre and includes Somerset in the Wynyard municipality. Urban Devonport is the area of continuous development around the urban centre.

Estimated resident populations of the fixed outer boundary areas are given in an earlier table.

## 1981 CENSUS RESULTS

The following selected tables contain information from the 1981 Census. The figures are 'as counted' i.e. no adjustments for under-enumeration nor place of usual residence have been made. Tables showing religious denomination, marital status, birthplace, industry sector and industry group were published in the 1983 *Year Book*. More detailed census statistics about the population can be obtained from the ABS on request.

## Population in Urban Centres and Bounded Localities

The next table shows the 'as counted' population and dwellings of urban centres and bounded localities in Tasmania at 30 June 1981:

Persons and Total Dwellings in Urban Centres and Bounded Localities at 30 June 1981

Locality	Males	Females	Persons	Occupied dwellings	Unoccupied dwellings
Beaconsfield .....	426	472	898	296	39
Beauty Point .....	507	491	998	344	90
Bicheno .....	336	338	674	214	131
Bothwell .....	187	169	356	131	26
Bracknell .....	173	174	347	111	2
Branxholm .....	141	132	273	91	6
Bridgewater-Gagebrook .....	3 339	3 541	6 880	1 780	79
Bridport .....	427	458	885	344	242
Burnie-Somerset .....	10 029	10 339	20 368	6 584	465
Campbell Town .....	415	464	879	300	24
Carrick .....	145	146	291	91	8
Cremorne .....	143	132	275	104	76
Cressy .....	319	321	640	207	8
Currie .....	443	416	859	288	29
Cygnets .....	350	365	715	237	20
Deloraine .....	904	1 019	1 923	691	54
Devonport .....	10 267	11 157	21 424	7 040	483
Dilston .....	122	101	223	73	8
Dodges Ferry .....	357	386	743	260	501
Dover .....	297	273	570	189	60
Dunalley .....	105	98	203	79	56
Electrona .....	110	117	227	61	5
Evandale .....	314	300	614	203	7
Exeter .....	171	182	353	105	8
Fingal .....	231	193	424	144	16
Forth .....	132	141	273	84	3
Franklin .....	227	252	479	138	4
Geeveston .....	434	426	860	262	24
George Town .....	2 828	2 764	5 592	1 584	112
Grassy .....	467	313	780	189	13
Gravelly Beach .....	265	270	535	189	13
Hadsden .....	450	458	908	267	14
Hagley .....	117	115	232	61	2
Heybridge .....	191	204	395	146	8
Hobart .....	62 834	65 769	128 603	43 881	2 600
Huonville-Ranelagh .....	686	661	1 347	463	30
Kempton .....	120	106	226	73	4
Kettering .....	136	152	288	88	11
Kingston-Blackmans Bay .....	4 194	4 362	8 556	2 764	155
Lanena-Blackwall .....	208	231	439	174	18
Latrobe .....	1 180	1 221	2 401	721	40
Lauderdale .....	1 057	1 060	2 117	672	66
Launceston .....	31 210	33 345	64 555	21 734	1 387
Legana .....	477	487	964	302	15
Lilydale .....	158	150	308	108	5
Longford .....	988	1 039	2 027	689	46
Low Head .....	171	168	339	111	104
Luina .....	324	198	522	125	19
Margate .....	242	234	476	151	3

continued next page

## Persons and Total Dwellings in Urban Centres and Bounded Localities at 30 June 1981—continued

Locality	Males	Females	Persons	Occupied dwellings	Unoccupied dwellings
Maydena .....	239	222	461	128	24
Mole Creek .....	163	140	303	101	18
New Norfolk .....	3 129	3 114	6 243	1 682	116
Nubeena .....	121	104	225	81	24
Oatlands .....	271	274	545	199	23
Orford .....	195	183	378	160	212
Penguin .....	1 270	1 346	2 616	826	60
Perth .....	616	613	1 229	418	24
Pontville .....	460	448	908	282	16
Port Sorell .....	415	444	859	318	231
Queenstown .....	1 925	1 789	3 714	1 169	125
Railton .....	444	413	857	275	21
Richmond .....	299	288	587	207	17
Ridgley .....	223	229	452	127	4
Ringarooma .....	111	112	223	83	4
Rosebery .....	1 485	1 190	2 675	648	51
Ross .....	141	148	289	104	22
Rossarden .....	207	158	365	106	69
St Helens .....	495	510	1 005	354	80
St Marys .....	318	335	653	221	26
Savage River .....	632	509	1 141	292	33
Scottsdale .....	998	1 004	2 002	652	34
Seven Mile Beach .....	352	330	682	230	17
Sheffield .....	462	483	945	281	21
Smithton .....	1 692	1 686	3 378	1 060	52
Snug .....	352	332	684	213	15
Sorell-Midway Point .....	1 288	1 256	2 544	829	52
Stanley .....	311	292	603	206	30
Strahan .....	196	206	402	136	16
Sulphur Creek .....	175	192	367	117	9
Swansea .....	205	223	428	156	47
Tarraleah .....	287	211	498	125	10
Triabunna .....	475	449	924	272	20
Tullah .....	1 369	525	1 894	296	17
Turners Beach .....	415	427	842	264	23
Ulverstone .....	4 456	4 957	9 413	3 154	247
Waratah .....	185	157	342	119	24
Westbury .....	561	600	1 161	410	28
Woodbridge .....	147	112	259	78	6
Wynyard .....	2 269	2 313	4 582	1 432	108
Zeehan .....	959	791	1 750	482	28

## The Labour Force

Australia follows international definitions in defining the labour force which was defined as comprising persons: (i) who worked for payment or profit; (ii) who had a job from which they were temporarily absent (e.g. on holiday, sick); (iii) who were temporarily laid-off without pay; (iv) who did not have a job and were actively looking for work.

The following table provides details of the labour force status of the population at the 1976 and 1981 Censuses:

## Labour Force Status of the Population 1976 and 1981

<i>Labour force</i>	<i>1976 Census</i>				<i>1981 Census</i>			
	<i>Males no.</i>	<i>Females no.</i>	<i>Persons no.</i>	<i>Pro- portion percent</i>	<i>Males no.</i>	<i>Females no.</i>	<i>Persons no.</i>	<i>Pro- portion percent</i>
In the labour force—								
Employed—								
Wage or salary earner .....	92 447	47 253	139 700	34.7	92 771	52 430	145 201	34.7
Self-employed .....	8 977	3 402	12 379	3.1	9 498	4 072	13 570	3.2
Employer .....	6 413	2 667	9 081	2.3	6 706	3 112	9 818	2.3
Helper .....	441	2 344	2 786	0.7	334	1 479	1 813	0.4
Total .....	108 278	55 667	163 945	40.7	109 309	61 093	170 402	40.7
Unemployed .....	4 002	2 676	6 679	1.7	8 547	5 569	14 116	3.4
Total labour force .....	112 280	58 343	170 624	42.4	117 856	66 662	184 518	44.0
Not in the labour force—								
15 years and over .....	30 188	86 390	116 578	28.9	34 760	90 075	124 835	29.8
Under 15 years .....	59 043	56 620	115 664	28.7	56 025	53 579	109 604	26.2
Total .....	89 231	143 010	232 242	57.6	90 785	143 654	234 439	56.0
<b>Total .....</b>	<b>201 512</b>	<b>201 354</b>	<b>402 865</b>	<b>100.0</b>	<b>208 641</b>	<b>210 316</b>	<b>418 957</b>	<b>100.0</b>

## Occupation

The following table shows the occupation of the employed persons at the 1976 and 1981 Censuses:

## Occupation of Employed Persons

<i>Occupation</i>	<i>1976 Census</i>		<i>1981 Census</i>			
	<i>Persons</i>	<i>Percent- age</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Percent- age</i>
Professional, technical, related workers—						
Architects, engineers and surveyors	1 482	0.9	1 590	11	1 601	0.9
Chemists, physicists, geologists, etc.	305	0.2	345	28	373	0.2
Biologists, veterinarians, agronomists	358	0.2	435	71	506	0.3
Medical practitioners and dentists	674	0.4	693	140	833	0.5
Nurses	4 306	2.6	357	4 585	4 942	2.9
Professional medical workers n.e.c.	533	0.3	302	405	707	0.4
Teachers	7 244	4.4	3 272	5 411	8 683	5.1
Clergy and religious orders	367	0.2	310	91	401	0.2
Law professionals	278	0.2	381	36	417	0.2
Artists, entertainers, writers, etc.	873	0.5	639	398	1 037	0.6
Draftsmen and technicians n.e.c.	2 502	1.5	2 136	460	2 596	1.5
Other professional, technical, etc.	1 690	1.0	1 562	794	2 356	1.4
<i>Total major group 0</i>	<i>20 611</i>	<i>12.6</i>	<i>12 022</i>	<i>12 430</i>	<i>24 452</i>	<i>14.3</i>
Administrative, executive and managerial workers—						
Administrative and executive (government) n.e.c.(a)	508	0.3	738	30	768	0.5
Employers, self employed, managers n.e.c.	8 977	5.5	8 946	1 984	10 930	6.4
<i>Total major group 1</i>	<i>9 484</i>	<i>5.8</i>	<i>9 684</i>	<i>2 014</i>	<i>11 698</i>	<i>6.9</i>

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## Occupation of Employed Persons—continued

Occupation	1976 Census		1981 Census			
	Persons	Percent- age	Males	Females	Persons	Percent- age
Clerical workers—						
Bookkeepers and cashiers	1 769	1.1	589	1 320	1 909	1.1
Stenographers and typists	3 490	2.1	20	2 573	2 593	1.5
Other clerical workers(a)	18 694	11.4	8 009	12 868	20 877	12.3
<i>Total major group 2</i>	<i>23 953</i>	<i>14.6</i>	<i>8 618</i>	<i>16 761</i>	<i>25 379</i>	<i>14.9</i>
Sales workers—						
Insurance, real estate, auctioneers etc.	852	0.5	800	72	872	0.5
Commercial travellers and agents	1 022	0.6	955	155	1 110	0.7
Proprietors, shopkeepers, etc.	10 825	6.6	4 069	7 132	11 201	6.6
<i>Total major group 3</i>	<i>12 699</i>	<i>7.7</i>	<i>5 824</i>	<i>7 359</i>	<i>13 183</i>	<i>7.7</i>
Farmers, fishermen, hunters, timber getters, etc.—						
Farmers and farm managers	7 753	4.7	5 395	1 789	7 184	4.2
Farm workers and farm foremen	4 059	2.5	3 251	678	3 929	2.3
Fishermen and related workers	404	0.2	580	48	628	0.4
Timber getters and other forestry workers	1 027	0.6	1 162	26	1 188	0.7
Hunters, trappers and other	57	0.0	47	2	49	0.0
<i>Total major group 4</i>	<i>13 301</i>	<i>8.1</i>	<i>10 435</i>	<i>2 543</i>	<i>12 978</i>	<i>7.6</i>
Miners, quarrymen and related workers—						
Miners, mineral prospectors and quarrymen	1 740	1.1	1 700	15	1 715	1.0
Well drillers, oil, water, etc.	13	0.0	14	—	14	0.0
Mineral treaters	362	0.2	333	6	339	0.2
<i>Total major group 5</i>	<i>2 115</i>	<i>1.3</i>	<i>2 047</i>	<i>21</i>	<i>2 068</i>	<i>1.2</i>
Transport and communication—						
Drivers and firemen, rail transport	244	0.1	203	—	203	0.1
Drivers, road transport	5 560	3.4	5 197	308	5 505	3.2
Inspectors, supervisors etc., transport	497	0.3	362	7	369	0.2
Telephone, telegraph, etc., operators	608	0.4	107	417	524	0.3
Postmasters, postmen and messengers	844	0.5	548	223	771	0.5
Other transport and communication n.e.c.	935	0.6	805	59	864	0.5
<i>Total major group 6</i>	<i>8 688</i>	<i>5.3</i>	<i>7 222</i>	<i>1 014</i>	<i>8 236</i>	<i>4.8</i>
Tradesmen, labourers, etc. n.e.c.—						
Spinners, weavers, knitters, dyers, etc.	1 647	1.0	390	512	902	0.5
Tailors, cutters, furriers, etc.	984	0.6	394	448	842	0.5
Leather cutters, lasters, sewers, etc.	122	0.1	103	54	157	0.1
Watchmakers, jewellers, etc.	409	0.2	422	38	460	0.3
Toolmakers, mechanics, plumbers, etc.	9 126	5.6	9 057	42	9 099	5.3
Electricians, electronic workers, etc.	4 464	2.7	4 227	39	4 266	2.5
Metal workers etc. n.e.c.	1 152	0.7	1 083	160	1 243	0.7
Carpenters, cabinet makers, etc.	5 985	3.7	5 195	64	5 259	3.1
Painters and decorators	1 386	0.8	1 339	28	1 367	0.8
Bricklayers, plasterers, construction workers n.e.c.	3 193	1.9	2 782	22	2 804	1.6
Compositors, engravers, bookbinders, etc.	800	0.5	606	164	770	0.5
Potters, kilnmen, glass formers, etc.	132	0.1	119	22	141	0.1
Millers, bakers, butchers, brewers, etc.	4 038	2.5	2 346	1 044	3 390	2.0

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## Occupation of Employed Persons—continued

Occupation	1976 Census		1981 Census			
	Persons	Percent- age	Males	Females	Persons	Percent- age
Paper, rubber and plastic workers, etc. n.e.c.	664	0.4	540	153	693	0.4
Packers, wrappers, labellers	416	0.3	180	312	492	0.3
Equipment operators, etc.	2 516	1.5	2 453	8	2 461	1.4
Storemen and freight handlers	3 114	1.9	2 740	80	2 820	1.7
Labourers n.e.c.	5 783	3.5	5 260	171	5 431	3.2
Apprentices, factory workers, etc. n.e.c.	1 006	0.6	1 573	327	1 900	1.1
Trade and production workers n.e.c.	2 563	1.6	2 112	106	2 218	1.3
<i>Total major group 7/8</i>	<i>49 499</i>	<i>30.2</i>	<i>42 921</i>	<i>3 794</i>	<i>46 715</i>	<i>27.4</i>
Service, sport and recreation workers—						
Fire brigade, police, etc.	1 877	1.1	1 940	88	2 028	1.2
Housekeepers, cooks, maids, etc.	4 458	2.7	836	4 044	4 880	2.9
Waiters and bartenders	1 760	1.1	645	1 481	2 126	1.2
Caretakers and cleaners, buildings	2 599	1.6	983	1 979	2 962	1.7
Barbers, hairdressers and beauticians	775	0.5	130	784	914	0.5
Launderers, dry cleaners and pressers	395	0.2	132	295	427	0.3
Athletes, sportsmen, etc.	102	0.1	105	42	147	0.1
Photographers and camera operators	105	0.1	119	24	143	0.1
Service, sport and recreation workers n.e.c.	1 929	1.2	816	1 374	2 190	1.3
<i>Total major group 9</i>	<i>14 001</i>	<i>8.5</i>	<i>5 706</i>	<i>10 111</i>	<i>15 817</i>	<i>9.3</i>
<i>Members of armed services</i>	<i>353</i>	<i>0.2</i>	<i>378</i>	<i>37</i>	<i>415</i>	<i>0.2</i>
<i>Inadequately described or not stated</i>	<i>9 242</i>	<i>5.6</i>	<i>4 452</i>	<i>5 009</i>	<i>9 461</i>	<i>5.6</i>
<b>Total</b>	<b>163 945</b>	<b>100.0</b>	<b>109 309</b>	<b>61 093</b>	<b>170 402</b>	<b>100.0</b>

(a) The figures are not directly comparable between censuses as there have been minor changes in the processing procedures for these categories.

The following table shows the number of hours worked by employed persons in the week:

Number of Hours Worked by Employed Persons					
1981 Census					
Weekly hours	Males	Females		Persons	Percentage
		Now married	Other		
None	2 344	1 193	535	4 072	2.4
1-14	3 034	6 536	1 980	11 550	6.8
15-24	1 999	5 652	1 385	9 036	5.3
25-34	3 581	3 566	1 559	8 706	5.1
35 or more	93 737	17 832	16 772	128 341	75.3
Not stated	4 614	2 791	1 292	8 697	5.1
<b>Total</b>	<b>109 309</b>	<b>37 570</b>	<b>23 523</b>	<b>170 402</b>	<b>100.0</b>

### Family Structure

The following table shows the family structure of Tasmania's population:

Family unit	1981 Census				
	Male head	Female head	Total families	Percentage	Number of persons
Head only—					
Aged less than 30 years	4 415	3 134	7 549	5.4	7 549
Aged 30-44 years	2 726	1 120	3 846	2.8	3 846
Aged 45 years and over	6 248	12 887	19 135	13.8	19 135
<i>Total</i>	<i>13 389</i>	<i>17 141</i>	<i>30 530</i>	<i>22.0</i>	<i>30 530</i>
Head, no spouse and—					
1 dependant	567	3 213	3 780	2.7	7 560
2 dependants	319	2 275	2 594	1.9	7 782
3 dependants	102	987	1 089	0.8	4 356
4 dependants	34	297	331	0.2	1 655
5 or more dependants	10	109	119	0.1	746
<i>Total</i>	<i>1 032</i>	<i>6 881</i>	<i>7 913</i>	<i>5.7</i>	<i>22 099</i>
Head and spouse only—					
Head aged less than 30 years	5 280	677	5 957	4.3	11 914
Head aged 30-44 years	2 438	198	2 636	1.9	5 272
Head aged 45 years and over	20 722	1 234	21 956	15.8	43 912
<i>Total</i>	<i>28 440</i>	<i>2 109</i>	<i>30 549</i>	<i>22.0</i>	<i>61 098</i>
Head, spouse and—					
1 dependant	10 206	520	10 726	7.7	32 178
2 dependants	16 907	618	17 525	12.6	70 100
3 dependants	8 368	252	8 620	6.2	43 100
4 dependants	2 481	64	2 545	1.8	15 270
5 or more dependants	717	24	741	0.5	5 471
<i>Total</i>	<i>38 679</i>	<i>1 478</i>	<i>40 157</i>	<i>29.0</i>	<i>166 119</i>
Head, no spouse, other adult(s) and—					
No dependants	1 954	4 139	6 093	4.4	13 634
1 dependant	204	951	1 155	0.8	3 919
2 dependants	95	497	592	0.4	2 571
3 dependants	32	172	204	0.1	1 081
4 dependants	15	69	84	0.1	525
5 or more dependants	6	42	48	0.0	371
<i>Total</i>	<i>2 306</i>	<i>5 870</i>	<i>8 176</i>	<i>5.9</i>	<i>22 101</i>
Head, spouse, other adult(s) and—					
No dependants	10 592	404	10 996	7.9	37 229
1 dependant	5 189	147	5 336	3.9	23 558
2 dependants	3 084	82	3 166	2.3	16 955
3 dependants	1 191	40	1 231	0.9	7 702
4 dependants	365	10	375	0.3	2 762
5 or more dependants	155	5	160	0.1	1 408
<i>Total</i>	<i>20 576</i>	<i>688</i>	<i>21 264</i>	<i>15.3</i>	<i>89 614</i>
Non-family members	..	..	..	..	27 396
<i>Total</i>	<i>104 422</i>	<i>34 167</i>	<i>138 589</i>	<i>100.0</i>	<i>418 957</i>

## VITAL STATISTICS

## Summary of Vital Statistics, Tasmania

Year	Number registered				Rate per 1 000 of mean population			Infant mortality (deaths under one year per 1 000 live births)
	Marriages	Live births	Deaths	Infant deaths (a)	Marriages proportion	Live births proportion	Deaths proportion	
1978 .....	3 148	6 788	3 311	97	r 7.53	r 16.35	r 7.92	14.3
1979 .....	3 254	6 757	3 167	95	r 7.73	r 16.16	r 7.53	14.1
1980 .....	3 433	6 735	3 392	79	r 8.10	r 15.90	8.01	11.7
1981 .....	3 515	7 188	3 320	86		8.23	16.83	7.77
1982 .....	3 576	7 002	3 432	55	8.32	16.30	7.99	7.8

(a) Deaths under one year; included also in total deaths.

*Crude Rate Comparisons*

The rates per 1 000 of mean population for births, deaths and marriages are referred to as *crude* rates. It will be seen in regard to marriages, that not *all* the population is 'at risk'; children and those already married being obvious excluded examples. Similarly, births are clearly events related to certain fertile age groups of women and not to the total population. Births also are related to the number of married persons and to the age structure of the married proportion of the community. Finally, deaths have a definite relationship with the numbers of each sex and the age structure of the community. Therefore, crude rates are valid measures of comparison in the short term only.

Subject to this limitation, the following Tasmanian historical comparisons exist as from 1880:

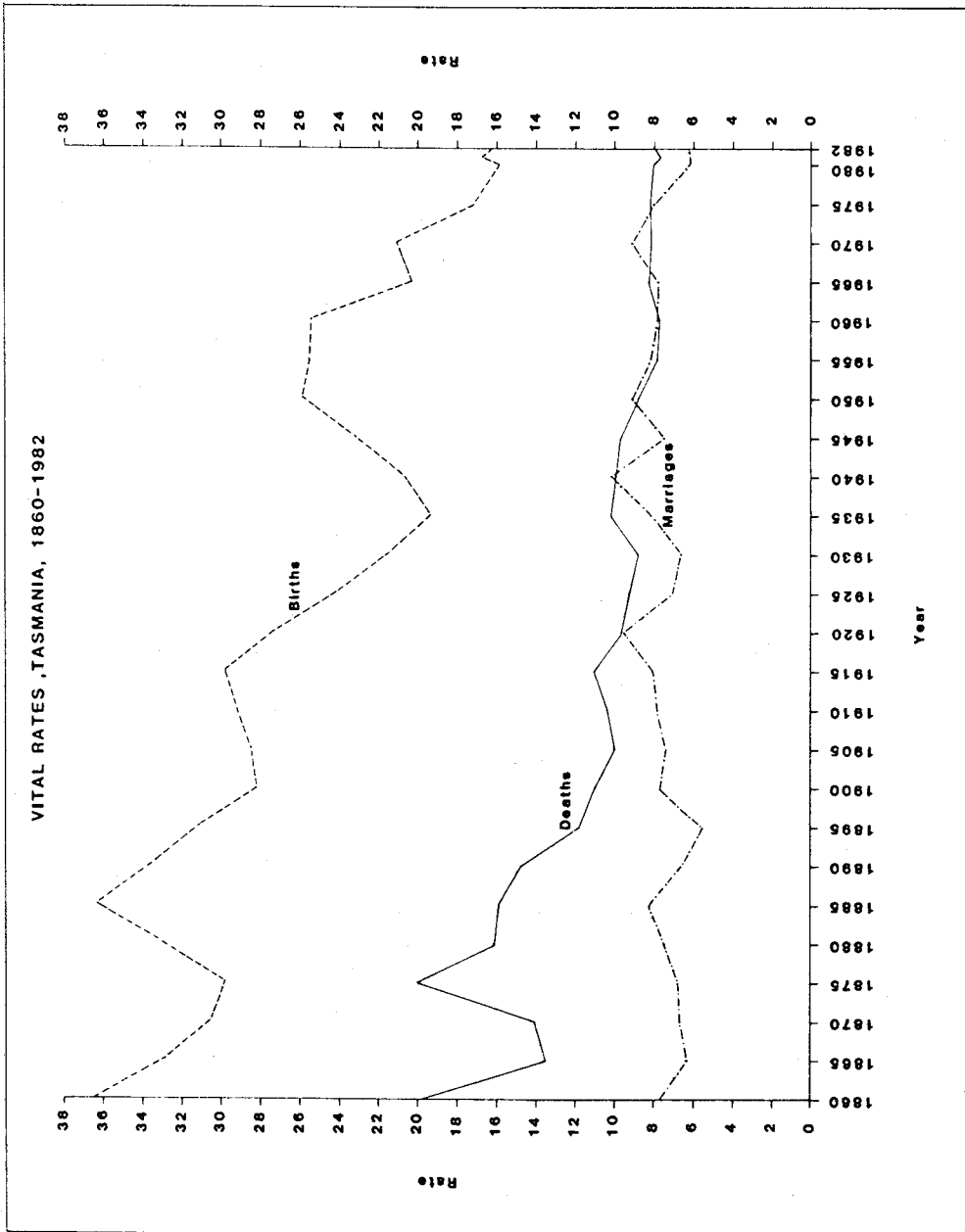
- (i) crude marriage rate: highest 10.51 (1946); lowest 5.50 (1859 and 1896);
- (ii) crude birth rate: highest 36.63 (1884); lowest 15.90 (1980);
- (iii) crude death rate: highest 17.41 (1883); lowest 7.53 (1979).

It is probably significant that 1946 was the year of rapid demobilisation after World War II and that a similar marriage trend was recorded for 1919 and 1920 after World War I. The crude birth rate for 1980 (15.90 per 1 000 of mean population) is the lowest recorded. The popularly accepted theory attributes the current low figure to deliberate family planning.

*Review of Infant Mortality*

Infant mortality relates to the number of deaths of children aged *under one year* and the rate is expressed as the number of such deaths per 1 000 live births. It follows that comparisons over long periods of time are valid and not affected by the limitations attached to crude rates. The peak year since 1880 was 1883 with a rate of 124.0. In the period 1880-1910, the annual infant mortality rate exceeded 100 on 14 occasions. There has been a steady improvement in infant mortality rates over the past 50 years. The rate for the period 1916-1920 was 64, for the year 1961, 16.8, and in 1982 a record minimum of 7.8 was achieved.

At the turn of the century, 20 to 25 per cent of all deaths were those of infants under one year. The rapid fall in infant mortality rates since then has had a marked effect on the crude death rate. Infant mortality has fallen largely due to advances in medical science enabling the control of disease and the development of techniques to reduce perinatal deaths; improvements in child care and nutrition also have made a significant contribution. (A perinatal death is defined as; (i) the death of a viable fetus (product of conception of at least 20 weeks gestation or of weight not less than 400 grams) at any time up to the complete expulsion or extraction from its mother; and (ii) the death of a child born alive, where the death occurs at any time before the twenty-ninth day after the date of birth of the child. Details relating to perinatal deaths are included in the annual bulletins *Demography, Tasmania* (3101.6) and *Causes of Death, Tasmania* (3301.6).



### Marriages

The following table analyses the ages of all bridegrooms and brides contracting marriages registered in 1982:

**Bridegrooms and Brides by Age, Tasmania, 1982**

Age last birthday (years)	Bridegrooms		Brides	
	Number	Per cent of total	Number	Per cent of total
Under 20 .....	133	3.72	626	17.51
20-24 .....	1 540	43.06	1 699	47.51
25-29 .....	939	26.26	586	16.39
30-34 .....	390	10.91	246	6.88
35-39 .....	188	5.26	145	4.05
40-44 .....	117	3.27	97	2.71
45-49 .....	76	2.13	47	1.31
50-54 .....	72	2.01	49	1.37
55-59 .....	45	1.26	39	1.09
60-64 .....	27	0.76	19	0.53
65 and over .....	49	1.37	23	0.64
Total .....	3 576	100.00	3 576	100.00

The next table gives the average age of brides and bridegrooms in recent years based on 'age last birthday' figures:

**Average Age of Bridegrooms and Brides (Years), Tasmania**

Particulars	1977	1978	1979	1980	1981	1982
Average age of bridegrooms—						
Bachelors .....	24.0	24.0	24.3	24.2	24.4	24.8
Widowers .....	56.2	56.7	57.2	57.1	59.0	57.4
Divorcees .....	37.7	37.6	37.3	37.0	36.1	37.2
All bridegrooms .....	27.3	27.4	27.7	27.5	27.8	28.1
Average age of brides—						
Spinsters .....	21.2	21.4	21.4	21.7	21.9	22.4
Widows .....	47.1	51.0	50.1	51.0	50.4	49.7
Divorcees .....	33.8	33.4	34.7	33.8	32.7	34.0
All brides .....	24.4	24.7	24.8	24.8	25.0	25.5

The following three tables show: (i) the number of persons under 21 years of age marrying; (ii) the conjugal condition of persons marrying; and (iii) marriages according to the type of marriage ceremony conducted, for a six-year period.

**Marriages: Persons Under 21 Years of Age, Tasmania**

Year	Age in Years						Persons under 21 years	
	15	16	17	18	19	20	Number	Percent-age of all marriages
<i>Bridegrooms</i>								
1977 .....	—	—	1	77	156	286	520	16.42
1978 .....	—	—	3	66	151	285	505	16.04
1979 .....	—	—	3	62	128	267	460	14.14
1980 .....	—	—	6	57	133	248	444	12.93
1981 .....	—	—	1	49	101	228	379	10.78
1982 .....	—	—	—	33	100	240	373	10.43

continued next page

## Marriages: Persons Under 21 Years of Age, Tasmania—continued

Year	Age in Years						Persons under 21 years	
	14	15	16	17	18	19	20	Number Percent- age of all marriages
<i>Brides</i>								
1977 .....	—	2	57	128	375	432	367	1 361 42.99
1978 .....	—	1	43	105	317	433	406	1 305 41.45
1979 .....	—	1	38	106	308	421	387	1 261 38.75
1980 .....	—	—	37	86	272	399	455	1 249 36.38
1981 .....	—	1	20	74	238	362	457	1 152 32.77
1982 .....	1	1	10	65	198	351	398	1 024 28.64

## Conjugal Condition of Persons Marrying, Tasmania

Year	Bridegrooms				Brides		Total marriages
	Bachelors	Widowers	Divorcees	Spinsters	Widows	Divorcees	
1977 .....	2 521	89	556	2 498	122	546	3 166
1978 .....	2 508	107	533	2 467	125	556	3 148
1979 .....	2 555	109	590	2 567	128	559	3 254
1980 .....	2 687	92	654	2 719	119	595	3 433
1981 .....	2 699	103	713	2 729	134	652	3 515
1982 .....	2 774	100	702	2 784	114	678	3 576

## Marriages, Religious and Civil, Tasmania

Particulars of celebration	1977	1978	1979	1980	1981	1982
Religious rites—						
Anglican .....	989	959	945	929	962	997
Catholic .....	539	515	500	508	554	497
Presbyterian (a) .....	66	34	38	16	51	31
Methodist .....	212	—	—	—	—	—
Congregational .....	14	—	—	—	—	—
Baptist .....	91	77	87	99	72	79
Churches of Christ .....	24	22	19	17	32	28
Salvation Army .....	26	33	21	26	34	37
Seventh Day Adventist .....	5	12	10	11	14	8
Uniting Church (b) .....	—	428	371	464	388	346
Other .....	94	109	164	157	143	126
Civil ceremonies (c) .....	1 106	959	1 099	1 206	1 265	1 427
Total .....	3 166	3 148	3 254	3 433	3 515	3 576

(a) From 1978 figures relate to 'Continuing Presbyterians' only, following the amalgamation of the Presbyterian, Methodist and Congregational Churches.

(b) In 1978 Presbyterian, Methodist and Congregational Churches amalgamated to form the 'Uniting Church'.

(c) Marriages contracted before Registrars and Marriage Celebrants.

## Divorce

The *Matrimonial Causes Act* 1860, as amended, provided for divorce in Tasmania until 1 February 1961, when Australia came under a uniform divorce law, the *Matrimonial Causes Act* 1959, passed by the Federal Parliament. The *Family Law Act* 1975 came into effect on 5 January 1976, replacing the *Matrimonial Causes Act* 1959. The main changes were the creation of the Family Court of Australia and the alteration of the grounds for divorce to the sole ground of irretrievable breakdown of marriage after 12 months separation. The commencement of the Family Court of Australia had a

dramatic effect on the figures. In 1976 dissolutions of marriage represented 50.62 per cent of the number of marriages contracted for that year (1 761 dissolutions compared with 3 477 marriages).

The following table gives the number of petitions filed by husbands and wives respectively, and the number of dissolutions of marriage during recent years. Every decree of dissolution of marriage is now, in the first instance, a decree *nisi* and is normally made absolute after a period of one month. Previously the period was three months.

Petitions Filed and Dissolutions Granted, Tasmania

Particulars	1977	1978	1979	1980	1981	1982
Total petitions filed .....	1 063	1 097	1 141	1 276	1 240	1 368
Dissolutions (a) granted on petition of—						
Husband .....	396	427	426	512	423	542
Wife .....	738	705	741	773	716	849
Total dissolutions .....	1 134	1 132	1 167	1 285	1 139	1 391

(a) Includes nullities of marriage.

The following three tables dissect dissolutions of marriage granted during 1982 by ages of parties at the time of marriage, by ages of parties at the time of dissolution and by the duration and issue of marriage:

Dissolution of Marriage (a): Ages of Parties at Time of Marriage, Tasmania, 1982

Age of husband (years)	Age of wife (years)							Total husbands
	Under 20	20-29	30-39	40-49	50-59	60 and over	Not stated	
Under 20 .....	147	44	—	—	—	—	—	191
20-29 .....	438	561	9	1	—	—	2	1 011
30-39 .....	24	65	24	3	—	—	1	117
40-49 .....	1	14	10	11	3	—	—	39
50-59 .....	—	1	6	5	4	2	—	18
60 and over .....	—	—	—	2	2	2	1	7
Not stated .....	2	4	2	—	—	—	—	8
Total wives .....	612	689	51	22	9	4	4	1 391

(a) Excludes nullities of marriage.

Dissolutions of Marriage (a): Ages of Parties at Time of Dissolution, Tasmania, 1982

Age of husband (years)	Age of wife (years)							Total husbands
	Under 20	20-29	30-39	40-49	50-59	60 and over	Not stated	
Under 20 .....	—	—	—	—	—	—	—	—
20-29 .....	8	361	27	1	—	—	—	397
30-39 .....	—	188	356	14	1	1	1	561
40-49 .....	—	8	92	123	9	1	—	233
50-59 .....	—	—	21	52	50	5	2	130
60 and over .....	—	—	5	1	34	21	1	62
Not stated .....	—	3	3	2	—	—	—	8
Total wives .....	8	560	504	193	94	28	4	1 391

(a) Excludes nullities of marriage.

**Dissolutions of Marriage (a): Duration of Marriage and Issue, Tasmania, 1982**

Duration of marriage (years)	Dissolutions of marriages with—						Total marriages dissolved	Total number of children (b)
	No children	1 child	2 children	3 children	4 children	5 or more children		
0- 4 .....	181	83	24	9	2	—	299	166
5- 9 .....	111	92	140	35	7	—	385	505
10-14 .....	30	39	120	75	11	4	279	569
15-19 .....	10	31	55	47	25	10	178	439
20-24 .....	35	34	31	13	4	2	119	164
25-29 .....	31	27	2	3	—	1	64	45
30 and over .....	57	8	1	—	1	—	67	14
Total .....	455	314	373	182	50	17	1 391	1 902

(a) Excludes nullities of marriage.

(b) Under 18 years of age.

**Births**

The following table shows the number of births classified according to the age of mother for recent years:

**Number of Births Classified According to Age of Mother, Tasmania**

Age group (years)	1977	1978	1979	1980	1981	1982	
						Number	Per cent
10-14 .....	11	6	2	3	6	7	0.1
15-19 .....	873	846	822	771	735	680	9.7
20-24 .....	2 395	2 417	2 363	2 291	2 546	2 344	33.5
25-29 .....	2 359	2 335	2 333	2 341	2 478	2 527	36.1
30-34 .....	869	914	996	1 037	1 131	1 159	16.6
35-39 .....	184	233	191	246	250	250	3.6
40-44 .....	40	31	47	44	42	34	0.5
45 and over .....	4	6	3	2	—	1	—
Total births .....	6 735	6 788	6 757	6 735	7 188	7 002	100.0

One observation of interest is that births of males, in total, usually exceed those of females. The next table shows births by sex and indicates masculinity:

**Births by Sex and Masculinity, Tasmania**

Particulars	1977	1978	1979	1980	1981	1982
Births of—						
Males .....	3 463	3 438	3 418	3 479	3 656	3 594
Females .....	3 272	3 350	3 339	3 256	3 532	3 408
Total .....	6 735	6 788	6 757	6 735	7 188	7 002
Masculinity (a) .....	105.84	102.63	102.37	106.85	103.51	105.46

(a) Number of male births per 100 female births.

In the following table, births are analysed by sex and by age of the mother and classified as nuptial or ex-nuptial:



## Births by Sex, Age of Mother and Nuptial State, Tasmania, 1982

Age Group (years)	Nuptial births		Ex-nuptial births		All births		Total
	Male	Female	Male	Female	Male	Female	
10-14 .....	—	—	3	4	3	4	7
15-19 .....	153	129	214	184	367	313	680
20-24 .....	997	972	195	180	1 192	1 152	2 344
25-29 .....	1 199	1 156	99	73	1 298	1 229	2 527
30-34 .....	537	535	51	36	588	571	1 159
35-39 .....	113	116	13	8	126	124	250
40-44 .....	19	12	1	2	20	14	34
45 and over .....	—	1	—	—	—	1	1
Total .....	3 018	2 921	576	487	3 594	3 408	7 002

## Birth Rates

The *crude birth rate* is expressed as the number of births per 1 000 of mean population; this is obviously an unsatisfactory measure since births are events strictly related to the number of women in the fertile age groups. A more satisfactory index is the *fertility rate*, expressed as the number of births per 1 000 women aged 15-44 years. However, there are profound differences between the relative fertility of various age groups and a further refinement is the calculation of *age-specific birth rates*. The following table shows age-specific birth rates for each five-year age group of females from 10-49 years, the fertility rate applicable to all women in the age group 15-44 years and the crude birth rate:

## Birth and Fertility Rates, Tasmania

Particulars	1977	1978	1979	1980	1981	1982
<i>Age Specific Birth Rates (a)</i>						
Age group (years)—						
under 20 .....	r 44.5	r 42.8	r 41.4	r 39.2	r 38.2	36.5
20-24 .....	r 139.6	r 140.3	r 133.6	r 125.0	r 136.6	123.9
25-29 .....	r 146.3	r 144.0	r 142.7	r 139.8	r 145.4	146.0
30-34 .....	r 61.6	r 61.3	r 64.9	r 64.8	r 68.7	71.5
35-39 .....	15.8	19.7	r 15.5	19.2	18.9	17.6
40-44 .....	3.9	2.9	4.4	4.0	3.7	2.9
45-49 .....	0.4	0.6	0.3	0.2	—	0.1
<i>Fertility Rate (b)</i>						
Fertility rate .....	r 75	75	r 73	71	75	72
<i>Crude Birth Rate (c)</i>						
Crude birth rate .....	r 16.2	16.3	16.1	15.9	16.8	16.3

(a) Number of births per 1 000 women in age groups shown.

(b) Number of births per 1 000 women aged 15-44 years.

(c) Number of births per 1 000 of mean population.

## Total Fertility and Gross and Net Reproduction Rates

*Total fertility* for a population is obtained either by summing single age-specific birth rates for a year and dividing by 1 000 or by summing five-year age-specific birth rates, multiplying by five and dividing by 1 000. The result represents the hypothetical number of children a woman would bear throughout her child bearing years if she experienced the age-specific birth rates for that particular year during her lifetime.

The *gross reproduction rate* is derived from *total fertility* and the ratio of female to total births. It indicates the number of female children who would be born on average to women, supposing the rates from which it was calculated were to apply throughout the reproductive period. It is an indication of the extent to which the population is reproducing itself except that it does not allow for females who failed to survive to the end of their childbearing period. The *net reproduction rate* allows for such mortality. It is obtained by multiplying the age-specific rates by the survivor proportions in the corresponding age group of the stationary or life table population. Mortality in childhood and young adulthood is now so low that there is little difference between current gross and net reproduction rates.

A net reproduction rate of one indicates that the reproduction pattern for the particular year is such as to replace the current generation of mothers by an equivalent number of daughters, if continued.

The next table gives total fertility rates and gross and net reproduction rates for Tasmania for recent years. If the net reproduction rate of a country falls below unity the population will ultimately decrease and die out (assuming there is no net immigration gain) unless fertility is raised and/or mortality lowered. The fact that the population may be currently increasing is irrelevant.

**Total Fertility, and Gross and Net Reproduction Rates, (a) Tasmania**

Year	Total fertility	Gross reproduction rate	Net reproduction rate
1977 .....	r 2.060	r 1.001	r 0.998
1978 .....	r 2.058	r 1.016	r 1.013
1979 .....	r 2.014	r 0.996	r 0.993
1980 .....	r 1.961	r 0.947	r 0.944
1981 .....	r 2.058	r 1.011	r 1.008
1982 .....	1.993	0.970	0.968

(a) Rates from 1978 onward are based on the state of usual residence of females. Previous figures are not strictly comparable as they were based on births 'registered' in Tasmania and the female population based on the state in which females were located at census dates.

### Infant Mortality

Infant mortality relates to children dying within one year of birth. The table that follows analyses such deaths in further detail and shows that the greatest mortality rate is associated with infants in their first day of life. To obtain a correct picture of relative risk, it should be noted that deaths in the 'one day and under one week' class are spread over six days; in the 'one week and under four weeks' class spread over 21 days; and in the final class, spread over 338 days.

**Infant Mortality: Number of Deaths and Mortality Rates at Specific Ages, Tasmania**

Year	Infant deaths		Mortality rate (a) at age specified			
	Number	Per 1 000 live births	Under 1 day	1 day and under 1 week	1 week and under 4 weeks	4 weeks and under 12 months
1977 .....	99	14.7	3.1	3.3	0.7	7.6
1978 .....	97	14.3	4.7	3.1	0.6	5.9
1979 .....	95	14.1	3.7	3.0	1.8	5.6
1980 .....	79	11.7	3.9	1.7	1.2	4.9
1981 .....	86	12.0	5.1	1.1	1.0	4.7
1982 .....	55	7.9	2.4	0.9	0.4	4.1

(a) Infant deaths per 1 000 live births.

### Causes of Infant Deaths

The following table has been compiled on the basis of the Ninth Revision (1975) of the International Classification of Diseases (World Health Organisation):

**Infant Mortality: Causes of Death Under One Year, Tasmania, 1982**

Cause	Age						Total
	Under one day	One day to six days	One week to three weeks	One month to two months	Three months to five months	Six months to eleven months	
240-279 Endocrine, nutritional and metabolic diseases and immunity disorders .....	—	—	—	1	—	—	1
460-519 Diseases of the respiratory system .....	—	1	—	—	—	—	1
740-759 Congenital anomalies .....	4	1	1	—	—	—	6
Perinatal causes							
765 Disorders relating to short gestation and unspecified low birthweight .....	—	1	—	—	—	—	1
767 Birth trauma .....	—	1	—	—	—	—	1
768 Intrauterine hypoxia and birth asphyxia .....	1	—	—	—	—	—	1
769 Respiratory distress syndrome ...	8	—	—	—	—	—	8
771 Infections specific to the perinatal period .....	—	—	—	—	—	1	1
772 Fetal and neonatal haemorrhage .....	3	1	—	—	—	—	4
774 Other perinatal jaundice .....	—	1	—	—	—	—	1
778 Conditions involving the integument and temperature regulation of newborn .....	1	—	—	—	—	—	1
798.0 Sudden infant death syndrome ..	—	—	2	12	10	4	28
E800- E999 Accidents, poisonings and violence .....	—	—	—	—	—	1	1
Total .....	17	6	3	13	10	6	55

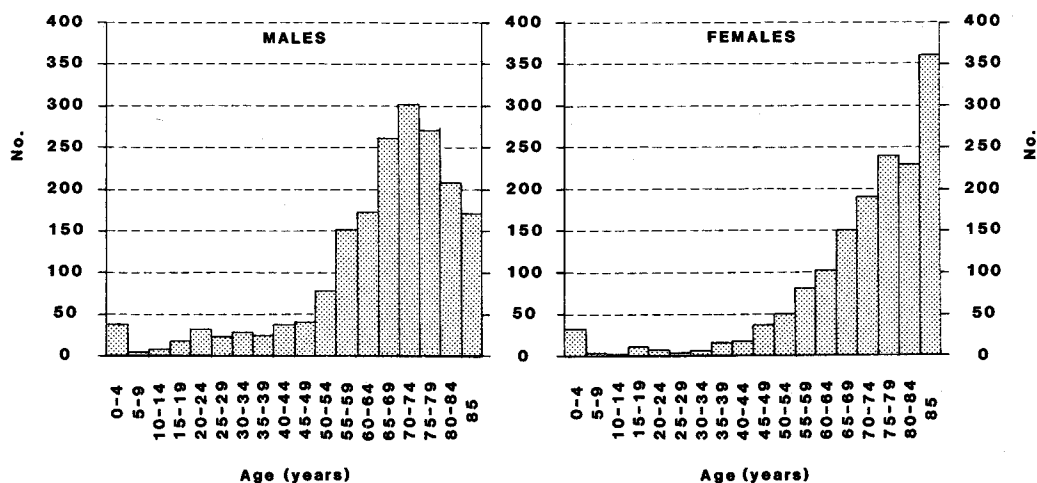
### Deaths

A marked difference exists between male and female crude death rates as shown in the following table:

**Male and Female Deaths and Crude Rates, Tasmania**

Year	Number of deaths			Deaths per 1 000 of mean population			Ratio of male to female crude death rates
	Males	Females	Persons	Males proportion	Females proportion	Persons proportion	
1977 .....	1 865	1 404	3 269	r 9.00	r 6.77	r 7.88	1.329
1978 .....	1 840	1 471	3 311	r 8.81	r 7.05	r 7.92	r 1.250
1979 .....	1 787	1 380	3 167	r 8.50	r 6.56	r 7.53	r 1.296
1980 .....	1 937	1 455	3 392	r 9.18	6.84	8.01	r 1.342
1981 .....	1 911	1 409	3 320	r 8.99	6.56	7.77	r 1.370
1982 .....	1 881	1 551	3 432	8.81	7.18	7.99	1.227

## DEATHS BY AGE AND SEX, TASMANIA 1982



## Death Rates for Specific Age Groups

## Death Rates for Specific Age Groups (a), Tasmania

Age group (years)	Males			Females			Persons		
	1946-48	1970-72	1980-82	1946-48	1970-72	1980-82	1946-48	1970-72	1980-82
0-4 .....	9.13	4.41	3.00	7.24	2.89	2.16	8.21	3.67	2.59
5-9 .....	1.15	0.46	0.35	0.69	0.35	0.18	0.92	0.41	0.27
10-14 .....	0.67	0.56	0.35	0.39	0.29	0.16	0.53	0.43	0.25
15-19 .....	1.62	2.39	1.55	1.46	0.59	0.50	1.54	1.50	1.02
20-24 .....	2.10	2.01	1.78	1.79	0.51	0.47	1.94	1.27	1.13
25-29 .....	2.12	1.83	1.36	1.74	0.81	0.41	1.93	1.33	0.89
30-34 .....	2.27	1.80	1.43	1.90	0.78	0.51	2.09	1.30	0.98
35-39 .....	3.10	2.08	1.82	2.59	1.31	1.08	2.85	1.70	1.46
40-44 .....	3.93	3.39	3.15	3.51	1.86	1.60	3.73	2.65	2.39
45-49 .....	5.88	5.30	4.58	4.66	3.04	3.34	5.28	4.19	3.97
50-54 .....	9.52	9.55	8.92	7.84	5.67	4.26	8.65	7.61	6.66
55-59 .....	16.98	15.52	13.95	10.03	8.02	6.80	13.44	11.80	10.35
60-64 .....	23.87	25.18	21.44	17.30	12.35	10.63	20.53	18.63	15.77
65-69 .....	41.82	39.59	34.53	27.35	21.40	17.70	34.56	30.22	25.68
70-74 .....	58.43	62.17	58.72	49.47	36.50	27.09	53.80	47.55	41.18
75-79 .....	103.22	92.09	85.75	77.00	60.85	48.69	89.78	72.86	63.99
80-84 .....	156.64	136.74	129.56	123.49	97.22	80.44	138.41	111.66	97.39
85 and over .....	292.36	218.20	212.89	220.32	200.29	160.12	250.16	206.17	174.30

(a) Rate per 1 000 of the population in the specified age group at census date.

Previously in this chapter, crude death rates were described as unsuitable for comparisons over long periods of time due to changes in the age structure of the community. In the above table, this difficulty is overcome by calculating death rates for specific age groups. The method employed is to obtain the average annual deaths for specific age groups over those three-year periods which are broken into equal parts by a census of

population (e.g. 30 June 1947 is the census date for a calculation of rates in the three years, 1946-1948 inclusive). Rates can then be calculated by comparing the average number of deaths for each group with the number of persons in each group as revealed by the census. In theory, the calculation of such rates need not be restricted to periods for which a census date forms the midpoint but the advantage of accepting such restriction lies in the accuracy of the age distribution obtained from the census. In the table above, three-year periods have been selected appropriate to the censuses of 1947, 1971 and 1981.

### Causes of Death

The next table shows causes of death, the rates per 100 000 of mean population and the proportion of deaths by cause based on the Ninth Revision (1975) of the International Classification of Diseases (adopted for use in 1979).

Causes of Death: Numbers and Rates, Tasmania, 1982

<i>Cause of death (a)</i>	<i>ICD9 Code Number</i>	<i>Number of deaths</i>	<i>Rate per 100 000 of mean population</i>	<i>Percentage of total deaths</i>
Intestinal infectious diseases .....	001-009	1	—	—
Tuberculosis .....	010-018	1	—	—
Septicaemia .....	038	4	1	0.1
Measles .....	055	1	—	—
All other infectious and parasitic diseases .....	(b)	9	2	0.3
Infectious and parasitic dis- eases .....	001-139	16	4	0.5
Malignant neoplasm of stomach ..	151	36	8	1.0
Malignant neoplasm of colon .....	153	89	21	2.6
Malignant neoplasm of rectum, rectosigmoid junction and anus ..	154	28	7	0.8
Malignant neoplasm of trachea, bronchus and lung .....	162	170	40	5.0
Malignant neoplasm of female breast .....	174	73	17	2.1
Malignant neoplasm of cervix uteri	180	13	3	0.4
Leukaemia .....	204-208	24	6	0.7
All other malignant neoplasms .....	(c)	322	75	9.4
Malignant neoplasms .....	140-208	755	176	22.0
Diabetes mellitus .....	250	42	10	1.2
Anaemias .....	280-285	7	2	0.2
Meningitis .....	320-322	3	1	0.1
Chronic rheumatic heart disease ..	393-398	10	2	0.3
Hypertensive disease .....	401-405	41	10	1.2
Ischaemic heart disease .....	410-414	960	223	28.0
Acute Myocardial infarction .....	410	620	144	18.1
Cerebrovascular disease .....	430-438	373	87	10.9
Atherosclerosis .....	440	68	16	2.0
All other diseases of the circula- tory system .....	(d)	269	63	7.8
Diseases of the circulatory system .....	390-459	1 721	401	50.1

*continued next page*

## Causes of Death: Numbers and Rates, Tasmania, 1982—continued

<i>Cause of death (a)</i>	<i>ICD9 Code Number</i>	<i>Number of deaths</i>	<i>Rate per 100 000 of mean population</i>	<i>Percentage of total deaths</i>
Pneumonia .....	480-486	57	13	1.7
Influenza .....	487	3	1	0.1
Bronchitis, emphysema and asthma .....	490-493	72	17	2.1
Ulcer of stomach and duodenum .	531-533	18	4	0.5
Appendicitis .....	540-543	1	—	—
Chronic liver disease and cirrhosis	571	22	5	0.6
Nephritis, nephrotic syndrome and nephrosis .....	580-589	23	5	0.7
Hyperplasia of prostate .....	600	5	1	0.1
Congenital anomalies .....	740-759	19	4	0.6
Certain conditions originating in the perinatal period .....	760-779	18	4	0.5
Birth trauma .....	767	1	—	—
Signs, symptoms and ill-defined conditions .....	780-799	31	7	0.9
All other conditions .....	Remainder of 210-799	367	85	10.7
Motor vehicle traffic accidents .....	E810-E819	98	23	2.9
Accidental falls .....	E880-E888	30	7	0.9
All other accidents and adverse effects .....	(e)	54	13	1.6
Accidents and adverse effects	E800-E949	182	42	5.3
Suicide .....	E950-E959	59	14	1.7
Homicide .....	E960-E969	7	2	0.2
All other external causes .....	(f)	4	1	0.1
Total, all causes .....	001-799 E880-E999	3 432	799	100.0

(a) No deaths were recorded in the following categories in 1982; Whooping cough (033), Meningococcal infection (036), Tetanus (037), Smallpox (050), Malaria (084), Nutritional marasmus (261), Other protein calorie malnutrition (262, 263), Acute rheumatic fever (390-392), Abortion (630-639), and Direct obstetrics deaths (640-646, 651-676).

(b) 020-032, 034, 035, 039-049, 051-054, 056-083, 085-139.

(c) 140-150, 152, 155-161, 163-173, 175-179, 181-203.

(d) 415-429, 441-459.

(e) E800-E807, E820-E879, E890-E949.

(f) E970-E999.

### Causes of Death in Age Groups

The previous tables showing causes of death make no reference to age, a complete dissection by age and cause being beyond the scope of a *Year Book*. Nevertheless, there is an extremely significant relationship between age and cause of death and the next table indicates, in summary form, their close inter-connection. For each of the specified causes in the next table, two percentages are shown: (i) deaths in a particular age group as a proportion of total deaths from all causes in that age group; and (ii) deaths in a particular age group as a proportion of total deaths from the same causes at all ages. The causes chosen and specified are such that they account, in total, for approximately 75 per cent or more of deaths in most of the given age groups.

Attention is called to 'Accidental and violent deaths' (800-999) which account for 52.5 per cent of deaths in the age from 1 to 34 years inclusive. Also noteworthy is the present relative unimportance of 'Infective and parasitic diseases' (001-139). The most important group, in a total sense, is 'Diseases of the heart' (391-398, 401-405, 410-429)

followed by 'Cancer (all forms)' (140-208); then 'Cerebrovascular diseases' (430-438); and 'Diseases of the respiratory system' (460-519). Nevertheless, the inter-connection between age and cause of death is so close that none of these causes needs to be specified for some age groups in the table.

Principal Causes of Death in Age Groups, Tasmania, 1982

Age group (years)	Inter- national classifi- cation	Cause of death	Deaths from specified causes in age groups		
			Number	Proportion of deaths	
				In age group (per cent)	At all ages (per cent)
Under 1 .....	798	Sudden death (cause unknown) .....	28	50.9	0.8
	768-770	Anoxic and hypoxic conditions .....	9	16.4	0.3
	740-759	Congenital anomalies .....	6	10.9	0.2
	772	Fetal and neonatal haemorrhage .....	4	7.3	0.1
	..	Other causes .....	8	14.5	0.2
All causes .....			55	100.0	1.6
1-4 .....	800-999	Accidents and violence .....	6	40.0	0.2
	740-759	Congenital anomalies .....	3	20.0	0.1
	..	Other causes .....	6	40.0	0.2
All causes .....			15	100.0	0.4
5-14 .....	800-999	Accidents and violence .....	10	52.6	0.3
	140-208	Cancer (all forms) (a) .....	4	21.1	0.1
	..	Other causes .....	5	26.3	0.1
All causes .....			19	100.0	0.6
15-24 .....	800-999	Accidents and violence .....	56	80.0	1.6
	140-208	Cancer (all forms) (a) .....	4	5.7	0.1
	740-759	Congenital anomalies .....	4	5.7	0.1
	..	Other causes .....	6	8.6	0.2
All causes .....			70	100.0	2.0
25-34 .....	800-999	Accidents and violence .....	44	80.0	1.3
	140-208	Cancer (all forms) (a) .....	5	8.1	0.1
	391-398	Diseases of heart .....	5	8.1	0.1
	401-405				
	410-429	Other causes .....	8	12.9	0.2
All causes .....			62	100.0	1.8
35-44 .....	140-208	Cancer (all forms) (a) .....	25	25.5	0.7
	391-398	Diseases of heart .....	25	25.5	0.7
	401-405				
	410-429				
	800-999	Accidents and violence .....	24	24.5	0.7
	430-438	Cerebrovascular disease .....	7	7.1	0.2
All causes .....			17	17.3	0.5
All causes .....			98	100.0	2.9

continued next page

## Principal Causes of Death in Age Groups, Tasmania, 1982—continued

Age group (years)	Inter- national classifi- cation	Cause of death	Deaths from specified causes in age groups		
			Number	Proportion of deaths	
				In age group (per cent)	At all ages (per cent)
45-54 .....	140-208	Cancer (all forms) (a) .....	79	38.0	2.3
	391-398	Diseases of heart .....	58	27.9	1.7
	401-405				
	410-429				
	800-999	Accidents and violence .....	26	12.5	0.8
	460-519	Diseases of respiratory system .....	12	5.8	0.3
	430-438	Cerebrovascular diseases .....	9	4.3	0.3
	530-579	Diseases of digestive system .....	8	3.8	0.2
	..	Other causes .....	16	7.7	0.5
		All causes .....	208	100.0	6.1
55-64 .....	391-398	Diseases of heart .....	184	35.9	5.4
	401-405				
	410-429				
	140-208				
	430-438	Cancer (all forms) (a) .....	177	34.5	5.2
	460-519	Cerebrovascular diseases .....	41	8.0	1.2
	800-999	Diseases of respiratory system .....	35	6.8	1.0
	530-579	Accidents and violence .....	28	5.5	0.8
	440-448	Diseases of digestive system .....	19	3.7	0.6
	..	Diseases of arteries .....	5	1.0	0.1
65-74 .....	..	Other causes .....	24	4.7	0.7
		All causes .....	513	100.0	14.9
75 and over .	391-398	Diseases of heart .....	369	40.7	10.8
	401-405				
	410-429				
	140-208				
	430-438	Cancer (all forms) (a) .....	228	25.1	6.6
	460-519	Cerebrovascular diseases .....	92	10.1	2.7
	530-579	Diseases of respiratory system .....	78	8.6	2.3
	320-389	Diseases of arteries .....	24	2.6	0.7
	..	Diseases of digestive system .....	21	2.3	0.6
	..	Diseases of nervous system and sense organs .....	14	1.5	0.4
75 and over .	..	Other causes .....	81	8.9	2.4
		All causes .....	907	100.0	26.4
75 and over .	391-398	Diseases of heart .....	571	38.5	16.6
	401-405				
	410-429				
	140-208				
	430-438	Cancer (all forms) (a) .....	231	15.6	6.7
	460-519	Cerebrovascular diseases .....	223	15.0	6.5
	530-579	Diseases of respiratory system .....	143	9.6	4.2
	290-319	Diseases of arteries .....	90	6.1	2.6
	580-619	Diseases of digestive system .....	52	3.5	1.5
	240-279	Mental disorders .....	36	2.4	1.0
75 and over .	320-389	Diseases of the genitourinary system .....	27	1.8	0.8
	..	Endocrine, nutritional and metabolic diseases and immunity disorders .....	24	1.6	0.7
	..	Diseases of the nervous system and sense organs .....	24	1.6	0.7
	..	Other causes .....	64	4.3	1.9
		All causes .....	1 485	100.0	43.3

(a) Includes Hodgkin's disease and the leukaemias.



*Heart Diseases*

As the previous two tables indicate, heart diseases (list items 391-398, 401-405, 410-429) are the greatest single cause of death. The next table summarises deaths from heart diseases for recent years:

Deaths from Heart Diseases (All Causes) (a), Tasmania

Year	Number of deaths			Death rate per 100 000 of mean population proportion	Deaths as a percentage of deaths from all causes
	Males	Females	Persons		
1977 .....	666	497	1 163	r 280	35.6
1978 .....	651	491	1 142	r 273	34.5
1979 .....	634	481	1 115	r 265	35.2
1980 .....	r 690	r 444	r 1 134	r 268	r 33.4
1981 .....	r 684	r 473	r 1 157	r 271	r 34.8
1982 .....	658	540	1 198	p 279	34.9

(a) List items 400-416, 420-443 in 1950; 390-398, 400-404, 410-429 from 1968; 391-398, 402, 404-405, 410-429 from 1979.

*Malignant Neoplasms*

In the next table, deaths from malignant neoplasms are shown according to site, for recent years and selected earlier years:

Deaths from Malignant Neoplasms, (a) Tasmania

Site of disease	Sex	1960	1970	1980	1981	1982
Malignant neoplasm of:						
Lip, oral cavity and pharynx	M	2	6	5	5	16
	F	—	1	4	5	4
Digestive organs and peritoneum	M	88	76	123	124	121
	F	86	81	114	101	121
Respiratory and intrathoracic organs	M	40	72	123	142	142
	F	3	19	41	27	37
Skin — Melanoma	M	3	2	6	5	9
	F	2	2	6	6	3
—Other	M	3	2	6	5	2
	F	—	3	1	1	4
Breast	F	25	43	43	45	73
Cervix uteri	F	13	13	8	8	13
Body and unspecified parts of uterus	F	10	4	10	6	3
Ovary and other uterine adnexa	F	10	12	18	20	17
Prostate	M	25	27	30	40	30
Bladder (b)	M	—	14	9	20	11
	F	—	1	5	2	3
Other and unspecified genitourinary organs	M	22	8	15	14	10
	F	8	6	7	6	7
Brain	M	9	7	10	8	13
	F	1	7	10	10	5
Leukaemia	M	12	8	13	15	10
	F	9	7	9	17	14
Other neoplasms of lymphatic and haematopoietic system	M	19	11	16	15	24
	F	5	12	13	21	17
All other and unspecified sites	M	7	19	21	25	26
	F	5	17	26	17	20
<hr/>						
Total	M	230	252	377	418	414
	F	177	228	315	292	341
<hr/>						
Death rate per 100 000 of mean population		117	124	163	r 165	177
Deaths as a percentage of deaths from all causes		15.2	15.1	20.4	21.4	22.0

(a) List items 140-204 in 1960; 140-207 in 1970; 140-208 from 1979.

(b) In 1960, listed as 'Bladder and other urinary organs'.

## EXPECTATION OF LIFE AND LIFE TABLES

Previously, reference was made to the limitations of crude death rates as a measure of mortality. However, a correct measurement of the mortality of the population can be obtained from life tables.

A life table is, in effect, a mathematical model, its starting point being a hypothetical population (say 100 000) of newly-born males or females. Using data for a given period (e.g. single year age distribution of an actual population, deaths at single ages, etc.), the compiler calculates the theoretical number of survivors at each age in the hypothetical population until there are no survivors remaining. For the method of calculating life expectancy see previous issues of the *Tasmanian Year Book*.

The next table gives the number of survivors ( $l_x$  values) and complete expectation of life ( $e^o_x$  values) for Tasmanian males:

Tasmania: Life Tables, 1982  
Survivors ( $l_x$  and Complete Expectation of Life ( $e^o_x$ ))  
Males

Age $x$	$l_x$	$e^o_x$	Age $x$	$l_x$	$e^o_x$	Age $x$	$l_x$	$e^o_x$
0	100 000	70.93	35	95 675	38.32	70	62 384	10.40
1	99 172	70.52	36	95 534	37.38	71	59 545	9.87
2	99 005	69.64	37	95 391	36.43	72	56 545	9.36
3	98 977	68.66	38	95 237	35.49	73	53 415	8.88
4	98 948	67.68	39	95 066	34.55	74	50 176	8.43
5	98 919	66.70	40	94 872	33.62	75	46 854	7.99
6	98 861	65.73	41	94 651	32.70	76	43 470	7.57
7	98 806	64.77	42	94 404	31.79	77	40 061	7.17
8	98 751	63.81	43	94 131	30.88	78	36 660	6.79
9	98 725	62.82	44	93 835	29.97	79	33 309	6.42
10	98 725	61.82	45	93 515	29.07	80	30 026	6.07
11	98 701	60.84	46	93 171	28.18	81	26 837	5.73
12	98 670	59.86	47	92 801	27.29	82	23 759	5.41
13	98 632	58.88	48	92 401	26.41	83	20 820	5.10
14	98 583	57.91	49	91 966	25.53	84	18 038	4.81
15	98 522	56.94	50	91 487	24.66	85	15 438	4.54
16	98 446	55.99	51	90 949	23.80	86	13 032	4.29
17	98 353	55.04	52	90 339	22.96	87	10 846	4.05
18	98 243	54.10	53	89 640	22.13	88	8 886	3.83
19	98 117	53.17	54	88 839	21.33	89	7 158	3.64
20	97 976	52.25	55	87 926	20.55	90	5 659	3.47
21	97 826	51.33	56	86 900	19.78	91	4 383	3.33
22	97 671	50.41	57	85 770	19.04	92	3 340	3.22
23	97 516	49.49	58	84 544	18.31	93	2 508	3.12
24	97 362	48.56	59	83 237	17.58	94	1 857	3.04
25	97 212	47.64	60	81 864	16.87	95	1 358	2.97
26	97 063	46.71	61	80 432	16.16	96	984	2.91
27	96 912	45.78	62	78 933	15.46	97	706	2.85
28	96 758	44.85	63	77 351	14.77	98	504	2.80
29	96 600	43.93	64	75 666	14.08	99	356	2.75
30	96 439	43.00	65	73 859	13.42			
31	96 278	42.07	66	71 909	12.77			
32	96 119	41.14	67	69 798	12.14			
33	95 965	40.20	68	67 511	11.53			
34	95 817	39.27	69	65 043	10.95			

The following table shows the  $l_x$  and  $e^o_x$  values for Tasmanian females:

Tasmania: Life Tables, 1982  
Survivors ( $l_x$  and Complete Expectation of Life ( $e^o_x$ ))  
Females

Age $x$	$l_x$	$e^o_x$	Age $x$	$l_x$	$e^o_x$	Age $x$	$l_x$	$e^o_x$
0	100 000	77.39	35	97 984	43.74	70	77 315	13.83
1	99 160	77.04	36	97 886	42.79	71	75 545	13.14
2	98 956	76.20	37	97 780	41.83	72	73 605	12.48
3	98 956	75.20	38	97 670	40.88	73	71 474	11.83
4	98 956	74.20	39	97 560	39.92	74	69 143	11.21
5	98 956	73.20	40	97 452	38.97	75	66 611	10.62
6	98 956	72.20	41	97 344	38.01	76	63 899	10.05
7	98 956	71.20	42	97 232	37.05	77	61 031	9.50
8	98 956	70.20	43	97 103	36.10	78	58 039	8.96
9	98 928	69.22	44	96 943	35.16	79	54 948	8.44
10	98 902	68.24	45	96 740	34.23	80	51 764	7.93
11	98 893	67.24	46	96 483	33.32	81	48 476	7.43
12	98 879	66.25	47	96 170	32.43	82	45 081	6.95
13	98 862	65.27	48	95 803	31.55	83	41 572	6.50
14	98 840	64.28	49	95 393	30.69	84	37 965	6.07
15	98 812	63.30	50	94 956	29.83	85	34 303	5.66
16	98 777	62.32	51	94 508	28.97	86	30 636	5.28
17	98 735	61.35	52	94 059	28.10	87	27 001	4.93
18	98 689	60.37	53	93 611	27.23	88	23 444	4.60
19	98 641	59.40	54	93 152	26.36	89	20 015	4.30
20	98 592	58.43	55	92 663	25.50	90	16 765	4.03
21	98 545	57.46	56	92 116	24.65	91	13 743	3.81
22	98 502	56.49	57	91 490	23.81	92	11 070	3.61
23	98 462	55.51	58	90 777	23.00	93	8 758	3.43
24	98 426	54.53	59	89 982	22.20	94	6 804	3.27
25	98 394	53.55	60	89 121	21.41	95	5 191	3.14
26	98 364	52.56	61	88 211	20.62	96	3 890	3.02
27	98 338	51.58	62	87 264	19.84	97	2 863	2.92
28	98 315	50.59	63	86 282	19.06	98	2 072	2.85
29	98 294	49.60	64	85 257	18.28	99	1 476	2.80
30	98 271	48.61	65	84 172	17.51			
31	98 241	47.62	66	83 013	16.75			
32	98 200	46.64	67	81 764	16.00			
33	98 144	45.67	68	80 409	15.26			
34	98 071	44.70	69	78 931	14.54			

The statistics in the above tables have been extracted from tables produced by the Commonwealth Actuary, the source data being supplied by the Australian Statistician and comprising: (i) the number of males and females living at each age last birthday, as shown by the 1981 Census; and (ii) the number of male and female deaths at each age (last birthday) in 1982.

### True Death Rates

From a life table, the total number of years lived by the original population of 100 000 can readily be calculated. In the case of the 1982 male life table, the total number of years lived was 7 093 000. It follows that the death rate of this population may be expressed as:

$$\frac{100\,000}{7\,093\,000} \times \frac{1\,000}{1} \text{ per } 1\,000 \text{ years lived;}$$

i.e. 14.098 deaths per 1 000 years lived.

Life table experience can be regarded as the experience of a cross section of the population in a *single year* and the above calculation derives what is known as a 'true death rate' (the Tasmanian true death rate for the 1982 male population was 14.10 deaths per 1 000 persons per annum). The true death rate is thus the reciprocal of the complete expectation of life of a person at birth multiplied by 1 000.

The true death rate for a given period is unaffected by the particular age distribution of that period, and is determined solely by the mortality experience of the period as manifested in the rate of survival from each year of age to the next. The table below sets out complete expectation of life at birth and true death rates for the periods covered by the Australian life tables:

**Australian: Complete Expectation of Life at Birth and True Death Rates**

Period	Complete expectation of life at birth (years)		True death rate (a)	
	Males	Females	Males	Females
1881-1890 .....	47.20	50.84	21.19	19.67
1891-1900 .....	51.06	54.76	19.58	18.26
1901-1910 .....	55.20	58.84	18.12	17.00
1920-1922 .....	59.15	63.31	16.91	15.80
1932-1934 .....	63.48	67.14	15.75	14.89
1946-1948 .....	66.07	70.63	15.14	14.16
1953-1955 .....	67.14	72.75	14.89	13.75
1960-1962 .....	67.92	74.18	14.72	13.48
1965-1967 .....	67.63	74.15	14.79	13.49
1970-1972 .....	68.10	74.80	14.68	13.37
1975-1977 .....	69.56	76.56	14.38	13.06
1982 .....	71.22	78.19	14.04	12.79

(a) Number of deaths per 1 000 in stationary (or life table) population in one year.

#### Further References

##### *ABS Publications Produced by the Tasmanian Office:*

- Compendium of Local Government Area Statistics (1304.6), 1982 released December 1982.
- Census of Population and Housing 30 June 1981, Characteristics of Persons in Hobart Suburbs (2201.6).
- Census of Population and Housing 30 June 1981, Characteristics of Persons in Launceston Suburbs (2202.6).
- Census of Population and Housing 30 June 1981, Characteristics of the Population and Dwellings in Local Government Areas (2401.6).
- Demography, Tasmania (3101.6), 1981.
- Population of Local Government Areas, Tasmania (3201.6), annual.
- Population and Vital Statistics, Tasmania (3202.6), quarterly.
- Age Distribution of the Estimated Resident Population in Local Government Areas (3203.6).
- Causes of Death, Tasmania (3301.6), annual.
- Divorces, Tasmania (3302.6), annual.

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- Census of Population and Housing, 30 June 1981: Persons and Dwellings in Local Government Areas and Urban Centres, Tasmania (2406.0), released June 1982.
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- Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0), annual.
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- Births (3301.0), annual.
- Deaths (3302.0), annual.
- Causes of Death (3303.0), annual.
- Perinatal Deaths (3304.0), annual.
- Marriages (3306.0), annual.
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## CHAPTER 7

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## Chapter 7

### EDUCATION, LIBRARIES AND THE ARTS

#### SCHOOL EDUCATION

##### Introduction

In 1869 Tasmania became the first colony in the British Empire to make education compulsory. The ages for obligatory attendance at school were progressively widened: in 1898 school attendance was made obligatory between the ages of seven and 13 years; in 1912 between six and 14 years; and in 1946 Tasmania became the only Australian state to make attendance compulsory up to the age of 16, the starting age being six.

Since 1945 the task of Tasmanian educational authorities, as in other Australian states, has been to provide more schools, more teachers, better facilities and cater for a wider range of curriculum offerings. The principal factors exerting these pressures were:

- (i) a rapidly growing school population;
- (ii) changed attitudes to education resulting in increased demands for secondary and tertiary education; and
- (iii) general community acceptance of the need for better education.

In recent years the pressures have changed with a rapid growth in unemployment, a shrinking job market and technological changes placing new demands on education systems. In addition, Federal Governments have accepted a greater financial responsibility through the Commonwealth Schools Commission and the Tertiary Education Commission.

##### Schools, Government and Non-Government

Education in Tasmania is now provided at primary, secondary and tertiary levels by government institutions and to secondary level by non-government schools. A period of 82 years in which the State accepted no financial responsibility for non-government education ended in 1967 when amendments to the *Education Act* 1932 allowed government grants to independent schools. The assistance is paid on a capitation basis and is dependent upon the level of schooling of the pupil.

In 1946 the Tasmanian Government and non-government systems of education were reorganised to provide a three, four or five-year post primary course. (The pre-war system of secondary education had comprised two stages, a three-year course followed by a two-year course; with a leaving age of 14, and with *selective entry* to government high schools. The proportion of pre-war pupils taking secondary education was very low.)

The dual nature of educational responsibility in Tasmania and the numbers of pupils in both government and non-government schools, in primary and secondary grades, are shown in the following table:

Government and Non-Government Schools, Tasmania  
Number of Pupils Enrolled at 1 July (a) According to Level of Education r

Particulars	1978	1979	1980	1981	1982	1983
Government schools—						
Primary (b) .....	44 030	43 996	43 938	42 706	41 406	39 598
Secondary .....	28 843	28 193	27 497	26 894	26 891	27 942
Special (c) .....	803	827	848	886	845	847
Total .....	73 676	73 016	72 283	70 486	69 142	68 387

continued next page

**Government and Non-Government Schools, Tasmania**  
**Number of Pupils Enrolled at 1 July (a) According to Level of Education r—continued**

<i>Particulars</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>
Non-government schools—						
Primary (b) .....	7 871	8 063	8 227	8 319	8 403	8 576
Secondary grades .....	6 356	6 312	6 393	6 598	6 923	7 364
Special (c) .....	24	26	—	—	—	—
Total .....	14 251	14 401	14 620	14 917	15 326	15 940
Total all schools	87 927	87 417	86 903	85 403	84 468	84 327

(a) From 1980; previously 1 August.

(b) Excludes kindergarten classes, in previous years kindergarten classes were included; see text below.

(c) Includes pupils in special classes attached to ordinary schools.

### *Kindergarten Classes and Preparatory Classes*

In this chapter, the term *kindergarten* is used to describe all pre-school classes, irrespective of whether they operate attached to other schools or whether they operate as separate entities. Figures are shown in a later table for enrolments in kindergartens. *Preparatory* classes, which commenced in 1974, are included in 'Primary grades'.

## **The State (or Government) School System**

### *Organisation*

The *Education Act* of 1885 established an Education Department headed by a Director of Education responsible to a Minister. In the present system professional and administrative functions are vested by the *Education Act (1932-1982)* in the Director-General who is responsible to the Minister for Education. Following a review of efficiency and effectiveness a major reorganisation of the Education Department commenced in 1983.

In managing the system of education the Director-General is assisted by a Deputy Director-General, three Executive Directors (Education Programs, Resources and TAFE) and five Deputy Directors plus central and regional administrative units.

Day to day administration of schools and colleges is organised on a regional basis. The three Regional Directors (North, North-West and South) are responsible to the Director-General and have their headquarters in Launceston, Burnie and Hobart respectively. They are supported by superintendents with experience and responsibilities in Early Childhood, Primary and Secondary education. Their offices are also responsible for a wide range of services to schools, colleges and the community.

### *The School System*

Education in Tasmania is based on a neighbourhood school approach. It is compulsory between the ages of six and 16 although special exemptions may be obtained. Education is secular and free but most parents either purchase or contribute towards purchase of books, materials, and some equipment. Transport to school is either provided by the Department (generally in rural areas) or subsidised where daily costs on public transport exceeds 60 cents. Children may commence full-time education in a preparatory grade after which there is a general pattern of schooling made up of six years of primary education followed by six years of secondary education.

### *Expenditure on Education*

The following table shows educational expenditure by the State Government from the public account; expenditure from Trust Funds is made by the State acting mainly as agent for the Federal Government.



**Expenditure on Education from Consolidated Revenue, Loan Fund and Trust Funds, Tasmania**  
(**\$'000**)

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<b>From Consolidated Revenue—</b>			
General administration, regulation and research .	13 422	13 589	(a) 2 966
Student transport .....	6 087	6 790	7 478
Primary and secondary .....	109 039	122 273	159 423
Technical .....	13 529	16 105	21 336
University .....	88	101	277
Other higher education .....	5 519	4 378	3 037
Special schools .....	3 091	3 342	4 671
Adult education .....	—	1 300	1 579
Other .....	51	88	31
<b>Total .....</b>	<b>150 824</b>	<b>167 966</b>	<b>200 798</b>
<b>From Loan Fund—</b>			
General administration, regulation and research .	7 959	5 795	4 501
Primary and secondary (including pre-school) ....	9 898	8 872	6 721
Technical .....	7 399	8 036	2 084
University .....	—	500	298
Other higher education .....	—	—	—
Adult education .....	—	—	—
Special schools .....	60	—	229
<b>Total .....</b>	<b>25 317</b>	<b>23 202</b>	<b>13 833</b>
<b>From Trust Funds—</b>			
General administration, regulation and research .	1	1	400
Primary and secondary .....	6 481	7 823	10 183
University .....	21 381	25 741	32 571
Other higher education .....	11 606	10 361	8 777
Adult education .....	6	—	9
Other .....	789	2 257	3 028
<b>Total .....</b>	<b>40 265</b>	<b>46 183</b>	<b>54 968</b>
<b>Grand total .....</b>	<b>216 406</b>	<b>237 350</b>	<b>269 599</b>

(a) The reduction in this item in 1981-82 is due to the reclassification of outlays to other purpose categories, mostly to 'Primary and secondary education', as a result of more detailed source data becoming available.

It should be noted that the preceding table includes amounts voted under other departmental heads for the provision of educational facilities, principally rental and tenancy charges and water, sewerage and other rates paid by the Lands Department.

### *Enrolment*

Enrolments in government schools for the last six years were:

<b>Government Schools, Tasmania</b> <b>Number of Pupils at 1 July (a) r</b>						
<i>Pupils</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>
Boys .....	37 876	37 545	37 076	36 231	35 623	35 308
Girls .....	35 800	35 471	35 207	34 255	33 519	33 079
<b>Total .....</b>	<b>73 676</b>	<b>73 016</b>	<b>72 283</b>	<b>70 486</b>	<b>69 142</b>	<b>68 387</b>

(a) From 1980; previously 1 August. Excludes kindergarten classes.

### *Age of Pupils in Each Class*

The following table summarises the system of government schooling in Tasmania

showing the average ages of pupils in each grade and the type of certificate issued for final year examinations:

Government Schools, Tasmania						
Average Ages of Pupils, Primary and Secondary, in Each Grade, and Certificates Issued						
Pre-primary and Primary classes			Secondary classes			
Grade	Mean age at 1.7.83		Grade	Mean age at 1.7.83		Certificate issued
	Years	Months		Years	Months	
Kindergartens—						
Separate .....	4	10	7 .....	12	8	..
Attached .....	4	11	8 .....	13	8	..
Preparatory .....	5	7	9 .....	14	8	Preliminary School Certificate
1 .....	6	7	10 .....	15	7	School Certificate
2 .....	7	7	11 .....	16	10	
3 .....	8	7	12 .....	17	9	Higher School Certificate
4 .....	9	8				
5 .....	10	8				
6 .....	11	8				

### Number of Government Schools

The following table shows the number of government schools in Tasmania:

Number of Government Schools, Tasmania, at 1 July (a)						
Type of school	1978	1979	1980	1981	1982	1983
Kindergartens (separate) .....	36	35	32	32	30	30
Primary (b) .....	159	160	167	169	170	169
Special .....	19	20	23	24	25	23
District .....	10	7	2	1	1	1
District High (c) .....	25	25	25	25	25	25
High .....	35	35	34	34	34	34
Secondary colleges ..	7	7	5	3	3	7
Community colleges ..	—	—	3	5	4	—
Total .....	291	289	291	293	292	289

(a) From 1980; previously 1 August.

(b) Most have kindergartens attached.

(c) The secondary facilities of these schools have been upgraded to full high school standard.

### Kindergarten Education

Within the general pattern of primary education Tasmania provides four years of early childhood education. Until 1969, pre-schools were established on the initiative of groups of parents. The Department provided buildings but eventually recovered half its outlay from parents. Commencing in 1969 all new facilities for pre-school education were provided in kindergartens attached to primary schools. At present there are kindergartens which are part of primary schools and others which are not attached to primary schools. Policy aims to provide kindergarten for children who are four years and over on January 1 of any given year. Age of entry to preparatory classes is 5, and 5½ to 6½ to year 1.

Enrolments in Kindergartens, Tasmania, at 1 July (a)						
Particulars	1978	1979	1980	1981	1982	1983
Kindergartens—						
Separate .....	1 533	1 388	1 116	1 043	1 039	975
Attached .....	5 347	5 103	5 163	4 800	5 140	5 292
Total .....	6 880	6 491	6 279	5 843	6 179	6 267

(a) From 1980; previously 1 August.

### State Primary Schools

Primary schools seldom enrol more than 600 pupils and are located close to pupils' place of residence. Most have six grades in addition to kindergarten and a preparatory class. In rural areas either small primary schools, district or district high schools have primary years and draw many pupils from outlying localities. Free transport has made this possible and is an example of the high priority given to meeting the educational needs of children in rural areas. Classes are usually heterogenous with teachers devising programs for children of various ability levels. Pupils progress on an age/year basis rather than on promotion by ability. The ages and numbers of pupils receiving primary education in government schools are as follows:

**Ages and Numbers of Pupils Receiving Government Primary Education (a), Tasmania, at 1 July (b) r**

Age last birthday (years)	1978	1979	1980	1981	1982	1983
Under 6 .....	2 662	2 662	3 194	3 070	2 984	2 961
6 .....	6 558	6 334	6 190	5 966	5 662	5 513
7 .....	7 015	6 618	6 381	6 078	5 992	5 614
8 .....	6 774	6 977	6 766	6 352	5 988	5 814
9 .....	6 941	6 674	6 928	6 732	6 323	5 957
10 .....	6 520	6 925	6 720	6 904	6 671	6 157
11 .....	5 996	6 244	6 338	6 317	6 622	6 384
12 .....	1 502	1 511	1 322	1 240	1 133	1 176
13 .....	59	50	97	46	31	21
14 .....	3	1	2	1	—	1
15 and over .....	—	—	—	—	—	—
Total—Boys .....	22 717	22 759	22 699	22 094	21 395	20 481
Girls .....	21 313	21 237	21 239	20 612	20 011	19 117
Total pupils .....	44 030	43 996	43 938	42 706	41 406	39 598

(a) Excludes pupils in special schools and classes.

(b) From 1980; previously 1 August.

**Primary Curriculum:** The primary school curriculum is designed to cater for the intellectual, physical, social, and emotional development of children during their critical formative years. The curriculum emphasises acquisition of basic language, writing and number skills within the wider context of developing a capacity to communicate, think and value. The schools task is to provide programs that enable each pupil to develop skills appropriate to their stage of development and that will foster further learning. These programs also provide for creativity, arouse the imagination, as well as giving the opportunity to develop initiative and logical thought processes.

### Special Schools and Special Classes

General policy is directed towards integrating children with special needs into normal schools. Special schools provide for children with different forms of handicap and who are unable to benefit from instruction in normal schools.

Instruction varies according to the type of handicap and where it is physical the main need is to maintain normal or near normal individual programs. Schools and classes for intellectually handicapped children follow a program that is tailored to meet individual needs.

A Superintendent of Special Education has statewide responsibilities in this field and is supported in each region by the superintendents.

### Government Secondary Schools

Almost all children attend secondary classes starting at an age ranging from 11½ to 13 years. The first four years of secondary education (years 7 to 10 inclusive) are catered

for in high schools or district high schools, which are non-selective, comprehensive, and provide a broad general education. All, with the exception of two high schools in Hobart, are co-educational. The final two years (11 and 12) are completed in a secondary college. Their operation is outlined later under 'Further Education'.

All high schools have a number of feeder primary schools. Pupils enter high school at the end of year 6. In the first two years (7 and 8), emphasis is on a general education. This becomes more specialised in the final two years (9 and 10). Many schools use ability grouping in subjects at this level to allow development of programs suited to particular pupils.

The age and number of pupils, by year level and sex, attending government secondary schools are shown by the following tables: (Note: The figures include year 11 and 12 pupils who attend secondary colleges.)

**Pupils Receiving Government Secondary Education (a), Tasmania, at 1 July (b) by Age**

Age last birthday (years)	1978	1979	r 1980	r 1981	1982	1983
10 .....	—	—	1	—	—	—
11 .....	210	205	364	212	160	185
12 .....	4 199	4 588	4 793	5 284	5 185	5 425
13 .....	6 141	5 790	5 967	6 091	6 536	6 292
14 .....	6 736	6 273	5 948	5 887	5 943	6 419
15 .....	6 153	6 229	5 791	5 437	5 472	5 880
16 .....	3 246	2 892	2 633	2 260	2 167	2 293
17 .....	1 457	1 423	1 287	1 311	1 078	1 002
18 and over .....	701	793	713	412	350	446
Total—Boys .....	14 680	14 296	13 868	13 599	13 715	14 313
Girls .....	14 163	13 897	13 629	13 295	13 176	13 629
Total pupils .....	28 843	28 193	27 497	26 894	26 891	27 942

(a) Excludes pupils in special schools and classes.

(b) From 1980; previously 1 August.

The next table shows the number of secondary pupils by sex and grade in all government schools:

**Secondary Pupils in Government Schools, Tasmania, at 1 July (a) by Year Level**

Year	Secondary level						Total
	7	8	9	10	11	12	
Boys							
1978 .....	3 153	3 397	3 485	2 968	883	794	14 680
1979 .....	3 151	3 103	3 351	3 036	857	798	14 296
1980 .....	3 115	3 119	3 064	2 967	r 818	785	r 13 868
1981 .....	3 342	3 073	3 051	2 641	r 843	r 649	r 13 599
1982 .....	3 342	3 316	3 041	2 678	754	584	13 715
1983 .....	3 413	3 322	3 271	2 723	961	623	14 313
Girls							
1978 .....	2 967	3 094	3 224	2 799	1 206	873	14 163
1979 .....	2 941	2 945	3 024	2 847	1 142	998	13 897
1980 .....	2 895	2 934	2 891	2 766	r 1 164	r 979	r 13 629
1981 .....	3 120	2 873	2 877	2 668	r 958	r 799	r 13 295
1982 .....	3 035	3 113	2 818	2 607	954	649	13 176
1983 .....	3 161	3 026	3 067	2 583	1 053	739	13 629

(a) From 1980; previously 1 August.

Current policy is directed towards educating children in their local communities. There has been positive discrimination towards country children and steps have been taken to make the secondary education available in district high schools comparable with that provided in urban high schools. One isolated school still has a small secondary population and parents who wish their children to have a wider range of opportunities than can be provided locally may enrol children in high schools. These students board in departmental hostels in larger centres. Assistance, through conveyance allowances, may be provided by the Department.

The high school curriculum provides a general, comprehensive education within a framework of subjects endorsed by the Schools Board of Tasmania. Most year 7 and 8 pupils follow a common course, developed by the school, and suited to their needs. In years 9 and 10 a wide range of academic, technical and cultural subjects provide the basis for pupils to choose a program that satisfies School Certificate requirements as well as allowing them to follow personal interests. Subjects are generally assessed at three levels but some are only offered at the most demanding level 3 and others are not offered beyond level 2.

### *Teaching Methods and School Design*

In recent years the school curriculum has undergone considerable change both in subject matter and teaching methods. While schools have responsibility for developing their own curriculum they operate within subject guidelines and Schools Board requirements.

Teaching methods also reflect the changed nature of learning with teachers using a wide variety of teaching approaches, materials and equipment. This allows school programs to be adapted to meet the varying needs, abilities and interest of pupils. Grouping in schools can be on an age, year or ability basis with promotion generally being according to age. Some schools have adopted composite grading which allows pupils, in certain subjects, to work at their own level of competence.

School design has also adapted to cater for the variety of teaching approaches. Current policy requires new primary schools of a standard plan with single and dual classrooms, annexes for small groups and larger general purpose areas. Most schools have also adapted classroom spaces to allow for a more flexible organisation of the learning program.

### *Secondary Colleges*

Since July 1983 the provision of Higher School Certificate (HSC) and Technical Education (TAFE) has been separated. The Deputy Director-General is now responsible for administration of secondary colleges and is assisted by a superintendent.

Seven secondary colleges operate within the State. The first was the Hobart Matriculation College (previously Hobart High School) - no junior students were enrolled after 1961 and by 1965 all students were attempting matriculation. In 1967 Launceston High School reached this stage and in 1968 the Elizabeth Matriculation College, in Hobart, was opened and elimination of junior classes was completed by 1970. In 1973 the newly constructed Rosny College was opened to serve the eastern shore suburbs of urban Hobart and the new Don College was opened at Devonport. Alanvale College at Launceston was opened in 1975 while the Hellyer College at Burnie was opened in 1976 to replace Higher School Certificate classes previously available at Burnie High School. Originally the prime purpose of these colleges was to concentrate specialist Higher School Certificate teaching in a few centres. The students also benefited from an intermediate step between high school and tertiary education.

General admission policy of the colleges is one of 'open door' to most courses and enrolments are of students who have passed the age of compulsory attendance. The majority of students studying HSC subjects are in their fifth and sixth year of secondary education. In recent years there has been a decline in the number of students passing directly from high schools but there has been a considerable increase in mature-age students studying HSC subjects.

The secondary colleges have also developed a wide range of offerings not specifically tied to the traditional HSC subjects. These aim to satisfy the needs of the more diverse group of the student population enrolling. Some of these subjects have been incorporated into the HSC Unit Subjects structure being developed by the Schools Board; others have remained college based subjects. Colleges have expanded significantly into the area of late afternoon and evening programming of classes for the large number of adult part-time students seeking a range of options from academic HSC to elective and recreational pursuits. In the latter area co-operation with Adult Education has occurred to ensure the appropriate development of a rationalised offering of community education courses. Courses for unemployed youth, work experience programs, transition education courses and increased emphasis on vocational guidance have resulted in the colleges becoming more effective in meeting the needs of those students not wishing to proceed with HSC studies.

Councils have now been established for colleges and these are beginning to demonstrate an increasing degree of community involvement in planning and college governance.

### *Assessment and Certification*

As a result of the proposals of the Schools Board and the *Radford Report*, the Schools Board was re-constituted with a membership of 21 on 1 September 1966, to allow the Board to become, in 1969, the sole examining and certifying body at the secondary level. A further amendment to the Act in 1974 made provision for the Council of Advanced Education to nominate members, and increased the membership of the Board to 23 as from 1 July 1974.

An important change of considerable significance to employers, and to the prerequisites they demand of applicants for employment, occurred when new types of certificates were introduced in 1969. There are only two such certificates issued, known as the School Certificate and the Higher School Certificate. These replaced all previous certificates which were group certificates demanding, in varying degrees of detail, certain compulsory subjects or groups of subjects as prerequisites to the award of the certificate. The essential difference is that both of the new certificates are subject certificates requiring no compulsory subjects or groups of subjects to be studied.

### *The School Certificate*

The subjects for this certificate may be taken at various levels and a wide choice is available to cater for different levels of ability and interest. A preliminary award may be granted to those candidates who leave school without qualifying for a full award in a subject. The full award will be granted to candidates who successfully complete the full syllabus in a subject. The certificate will be awarded as a result of a system of regional moderation which has been developed to ensure comparability of standards between schools.

### *The Higher School Certificate*

Candidates normally sit for Higher School Certificate subjects at the end of the fifth and sixth years of secondary education. The certificate is awarded as a result of assessments completed in November each year. Subjects may be studied at Level II or Level III, but both levels are not necessarily available for all subjects.

From 1982 awards in all Level III subjects have been determined by a combination of an external examination component and a standardised school assessment component. The weighting of the standardised school component must be not less than 25 per cent and not more than 50 per cent of the final result. The exact percentage of the weighting is determined by the Schools Board of Tasmania on the recommendation of the appropriate Subject Committee.

Syllabuses in subject areas offered at Level II where a Level III syllabus also exists provide for those who wish to take a terminal course in a subject as well as for those who require a foundation course before proceeding to the study of a Level III subject. In any one year no candidate may enter for both a Level II subject discussed above and the Level III subject in the same subject field.

Requirements for matriculation are determined by the University of Tasmania from the results of the Higher School Certificate assessments conducted by the Schools Board of Tasmania.

### **Non-Government (or Independent) Schools**

Non-government schools have played a valuable part in Tasmanian education. Policies are framed by principals in conjunction with their senior staff and with the approval of their governing bodies or church.

#### *Registration*

Non-government schools and teachers are subject to the regulations of the Teachers and Schools Registration Board. This Board consists of nine members who hear and determine all applications for registration and keep a record of all teachers and schools not administered by the Education Department. Every school is graded and teachers are registered in one or more classifications or as special subject teachers. 'Provisional' teachers are those gaining qualifications so they can be registered. The Board may prescribe the mode of classifying teachers, the course of study and training required, the examinations to be passed, and the recognition of overseas qualifications. To secure registration, schools must provide for proper access, drainage, light, ventilation and sanitary conveniences, and inspections may be made by officers appointed by the Board. A daily register of attendance has to be kept.

#### *State Assistance to Non-Government Schools and Pupils*

The *Education Act* 1932 was amended in 1967 to provide for direct payments to non-government schools. Currently the total level of assistance is calculated by taking 23 per cent of the estimated costs of educating a pupil in government primary and secondary schools and multiplying the amount by the number of pupils registered in non-government schools at 1 July each year. In 1982-83 this expenditure amounted to \$6 800 437. Additional assistance is paid to help schools in meeting interest payments on certain loans. The amount of the subsidy in 1982-83 was \$300 000. From the beginning of 1970 the Federal Government also provided per capita grants to independent schools. Details are contained in a later section dealing with Federal Government Activities in education.

Apart from these subsidies, benefits include: free or subsidised transport; use of the facilities of the Department's curriculum centre, media centre, and speech education and guidance branches; attendance at trade and domestic science classes if room is available; and attendance by teachers at Departmental schools of method.

#### *Enrolment at Non-Government Schools*

Most non-government school pupils are in schools controlled by religious denominations, as the next table shows:

**Pupils Enrolled in Non-Government Schools Tasmania, at 1 July (a)**  
(Number)

	<i>Church of England r</i>	<i>Catholic</i>	<i>Seventh- day Adventist</i>	<i>Christian Brethren</i>	<i>Other Denomin- ations</i>	<i>Non- Denomin- ational</i>	<i>All schools r</i>
<i>Pupils</i>							
1978 .....Boys	888	4 745	72	..	733	292	6 730
Girls	818	5 351	83	..	992	277	7 521
1979 .....Boys	915	4 741	88	..	708	322	6 774
Girls	809	5 466	82	..	983	287	7 627
1980 .....Boys	1 005	4 778	89	..	697	368	6 937
Girls	790	5 467	89	..	996	341	7 683
1981 .....Boys	1 057	4 872	99	..	705	423	7 156
Girls	774	5 481	96	..	992	418	7 761
1982 .....Boys	1 080	4 947	88	46	737	492	7 390
Girls	793	5 532	85	57	1 007	462	7 936
1983 .....Boys	1 132	5 064	93	46	782	589	7 706
Girls	770	5 665	92	59	1 116	532	8 234
<i>Schools</i>							
1983 .....	3	38	4	4	9	12	70

(a) From 1980; previously 1 August.

The following table shows the number of secondary pupils by sex and year level in all non-government schools:

**Secondary Pupils in Non-Government Schools, Tasmania, at 1 July 1983, by Year Level**

	<i>Year Level</i>						
<i>Pupils</i>	7	8	9	10	11	12	<i>Total</i>
Boys .....	817	776	686	666	319	234	3 498
Girls .....	870	815	822	713	393	249	3 862
Total .....	1 687	1 591	1 508	1 379	712	483	7 360

Of the 30 schools in 1983 which catered for secondary pupils, 16 had Higher School Certificate classes.

Most non-government school pupils are to be found in primary classes, with the majority enrolled in Catholic schools. The following table shows the numbers and ages of all pupils in non-government school primary and sub-primary classes:

**Pupils Receiving Non-Government Primary Education, Tasmania, at 1 July (a) by Age r**

<i>Age at last birthday (years)</i>	1978	1979	1980	1981	1982	1983
Under 7 .....	2 033	1 985	2 056	2 010	2 050	2 133
7 .....	1 164	1 136	1 131	1 107	1 083	1 149
8 .....	1 120	1 176	1 172	1 173	1 142	1 176
9 .....	1 096	1 199	1 225	1 208	1 234	1 202
10 .....	1 114	1 136	1 202	1 306	1 305	1 271
11 .....	1 077	1 118	1 207	1 246	1 334	1 346
12 .....	253	298	232	249	248	283
13 .....	12	15	2	20	5	13
14 and over .....	2	—	—	—	2	3
Total—Boys .....	3 832	3 879	3 984	4 100	4 144	4 208
Girls .....	4 039	4 184	4 243	4 219	4 259	4 368
Total pupils .....	7 871	8 063	8 227	8 319	8 403	8 576

(a) From 1980; previously 1 August. Excludes kindergarten pupils.



The following table shows the ages of pupils in non-government schools at secondary level:

Pupils Receiving Non-Government Secondary Education, Tasmania, at 1 July (a) by Age						
Age last birthday (years)	1978	1979	1980	1981	1982	1983
11 and under .....	69	65	121	94	90	89
12 .....	1 047	1 000	1 144	1 285	1 226	1 428
13 .....	1 292	1 257	1 307	1 393	1 704	1 510
14 .....	1 316	1 236	1 314	1 338	1 395	1 620
15 .....	1 271	1 347	1 262	1 248	1 227	1 332
16 .....	813	847	768	780	767	863
17 .....	458	445	391	390	453	450
18 and over .....	90	115	86	70	61	72
Total—Boys .....	2 892	2 882	2 953	3 056	3 246	3 498
Girls .....	3 464	3 430	3 440	3 542	3 677	3 866
Total pupils .....	6 356	6 312	6 393	6 598	6 923	7 364

(a) From 1980; previously 1 August.

### Teachers and Teacher Training

There is a variety of teacher training courses available to trainee teachers in this State. The University of Tasmania awards the Diploma of Education after a one-year post-graduate course in which graduate students train as infant, primary or secondary teachers. Since 1975, a four-year course leading to the degree of Bachelor of Education has been provided and a Master's degree is also offered. There is also a post-graduate course leading to the degree of Bachelor of Special Education.

The Tasmanian College of Advanced Education provides both a three-year course leading to a Diploma of Teaching and a four-year Bachelor of Education course. A course is provided for full-time and part-time graduate students leading to the degree of Master of Education. Large numbers of practising teachers also enrol in courses with the Centre for Continuing Education of Teachers thereby gaining extra qualifications which may lead to diplomas and degrees.

The Department provided studentships for teacher training at either the University of Tasmania or the Tasmanian College of Advanced Education. Since 1980 there has been a considerable reduction in the number offered and in 1983 there were no new studentships. Training institutions continue to enrol the number of students predicted to be required by Tasmanian schools.

The following table shows the number of teachers and teachers-in-training in Tasmanian government schools:

**Full-Time Teaching Staff in Government Schools (a) and Teachers-in-Training, Tasmania, at 1 July (b)**

Type of Teacher	1978	1979	1980	1981	1982	1983
Principals—						
Males .....	218	224	231	229	226	223
Females .....	29	25	28	20	28	35
Other teachers—						
Males .....	1 692	1 669	1 909	1 966	2 007	1 981
Females .....	2 896	2 848	3 088	3 061	3 160	3 043
Total teachers (a)—Males .....	1 910	1 893	2 140	2 195	2 233	2 204
Females .....	2 925	2 873	3 116	3 081	3 188	3 078
Teachers-in-training—						
Males .....	509	527	448	333	240	n.a.
Females .....	1 231	1 240	1 073	900	636	n.a.

(a) Includes teachers in non-teaching positions (e.g. curriculum branch staff, guidance officers, etc.) but excludes supervisors, those engaged in technical education, part-time teachers, and those on long service leave.

(b) From 1980; previously 1 August.

The following table shows the number of teachers and instructors in Tasmanian Government schools (excluding technical colleges):

**Number of Government School Teachers and Instructors (a), Tasmania, at 1 July 1982**

Type of school	Full-time			Part-time and casual		
	Males	Females	Persons	Males	Females	Persons
Kindergarten .....	4	172	176	—	33	33
Special .....	42	90	132	3	51	54
Primary .....	493	1 575	2 068	18	314	332
District—						
Primary .....	—	2	2	—	—	—
Secondary .....	1	1	2	1	3	4
District High—						
Primary .....	69	201	270	—	59	59
Secondary .....	207	142	349	16	47	63
High .....	969	740	1 709	24	35	59
Secondary colleges .....	254	119	373	59	78	137
Total .....	2 039	3 042	5 081	121	620	741

(a) Excludes teachers in non-teaching positions (e.g. curriculum branch staff, guidance officers, speech education, music and training aid centres).

In primary schools in 1982, 76 per cent of the full-time teachers were females. All subjects are taught by each teacher in these schools but itinerant teachers, when available, take physical education, music and speech classes on a circuit basis with each teacher being responsible for the teaching of the subject in several schools. In the post-primary schools, most teachers are specialists attached to subject departments within each school. In the district high schools, because of the smaller numbers of secondary pupils one teacher may take several subjects; rural science, home arts and crafts and technical subjects are usually handled by resident or itinerant specialists.

*Teacher Training:* Numbers of teachers-in-training for recent years are shown in the next table:

## Teachers-in-Training, Tasmania, at 1 July (a)

<i>Institution attended</i>	1977	1978	1979	1980	1981	1982
<i>Males</i>						
University of Tasmania .....	207	210	195	152	158	115
Tasmanian College of Advanced Education .....	251	295	329	296	174	r 124
Specialist trainees .....	4	4	3	—	1	1
Total .....	462	509	527	448	333	r 240
<i>Females</i>						
University of Tasmania .....	389	360	342	244	403	316
Tasmanian College of Advanced Education .....	804	847	869	813	483	r 309
Specialist trainees .....	22	24	29	16	14	11
Total .....	1 215	1 231	1 240	1 073	900	r 636

(a) From 1980: previously 1 August.

## TECHNICAL AND FURTHER EDUCATION

The Division of Technical and Further Education (TAFE) provides para-professional, trade, other vocational, preparatory vocational and adult education programs throughout Tasmania.

The Division is headed by the Executive Director, who is supported by a Deputy Director (TAFE) and a Senior Superintendent (Adult Education). It runs colleges in Hobart, Launceston, Devonport, Burnie and Queenstown, and a number of separately provided but administratively linked Adult Education Centres. Centres in Smithton, Scottsdale, Campbell Town, Oatlands and Huonville provide a more limited range of course offerings. The following table shows the number of colleges, teachers and students for 1983:

## Technical and Further Education 1983

	<i>Technical</i>	<i>Adult education</i>	<i>Total</i>
No. Institutions .....	6	12	18
No. Teachers—			
Full-time .....	494	(a)18	512
Part-time .....	1 010	1 069	2 079
No. Students—			
Full-time .....	1 891	—	1 891
Part-time .....	14 703	17 018	31 721

(a) Adult education full-time 'teachers' are primarily administrators.

*External Studies/Correspondence Courses* are administered through the Hobart Technical College's External Studies Service. They are intended for isolated students and others who are unable to attend regular classes. Many of the Certificate and HSC courses are available. However, the block training system has replaced a number of the apprentices' courses.

*Vocational Courses* provide for non apprentice training and include engineering, fashion, clothing manufacture, supervision, commercial and secretarial studies, business studies, child care, welfare studies and computing.

A significant number of students now undertake prevocational (trade-based) courses and special school to work transition studies.

*Teacher Education* courses for TAFE teachers were introduced through a UG2 Diploma course at the Tasmanian College of Advanced Education (Launceston). This course will enable teachers to up-grade their qualifications to diploma level. In-service education is also available for non-formal staff development and includes seminars, inter-state conferences plus courses and conferences conducted by Tasmanian industrial and commercial organisations.

Examinations are conducted by the Education Department in July and November each year. Papers are set and marked, or assessments carried out on a statewide basis, except for the first and second year trade subjects in which cases each college makes its own arrangements.

### Technical Education

#### *Colleges and Courses*

Compulsory schooling ends at age 16 and pupils have a number of choices:

- (i) to try to find employment;
- (ii) to attend a further education college before entering tertiary institutions or the workforce;
- (iii) to combine employment with part-time study at a further education college (as in the case of trade apprentices).

*TAFE Certificate courses* cater for middle level vocations between the trades and professions. They are designed in consultation with industry to meet the increasing needs of para-professional personnel in areas such as engineering, accounting and social welfare. On successful completion of a course a certificate is awarded by the Education Department.

*Trade courses* combine theoretical and practical aspects of the trade and are complementary to employer training given to apprentices. From 1965 apprentices have been required to attend one full day per week for three years and this almost has eliminated evening classes for apprentice training. Since 1968 block training has operated for a number of trades and for apprentices previously taught by correspondence. During the year, periods of two weeks are spent in full-time study in a technical college. These courses are offered in association with the Apprenticeship Commission and a Certificate of Trade Proficiency is awarded upon successful completion of the course. With the instruction of trade courses in farming and horticulture in 1979 the definition of these courses has been widened. Post trade courses are also available to extend the skills and knowledge of tradesmen.

### Adult Education

Establishment of a mechanics' institute in Hobart in 1827 was the start of adult education in Australia. Mechanics institutes, later established in other cities, provided public lectures and libraries. The first Tasmanian Workers Education Branch was begun in Hobart in 1913 to promote the higher education of working men and women. For many years the WEA worked in conjunction with the University of Tasmania and provided classes and public lectures.

From 1948 to 1975 adult education was administered by a statutory board established under the *Adult Education Act* 1948. From 1 January 1976, the *Education Act (No. 2)* 1975 came into force, which proclaimed an advisory Adult Education Board and a Division of Adult Education within the Education Department. Adult education is now a section of the Division of Technical and Further Education.

Hobart has four Adult Education Centres: at the Domain, Claremont, South Hobart, North Hobart and Rosny College. There are also centres and offices established in Launceston, Devonport, Burnie, Queenstown, Oatlands, Campbell Town and Kingston.

#### *Operations*

An extremely wide variety of courses, ranging in duration from one term to one year,

is offered. A function of the Division is to initiate innovatory programs and to respond to changes in community needs. Subject areas include basic education, business studies, foreign languages, arts and crafts and music and dance.

In co-operation with the Federal Department of Immigration and Ethnic Affairs, adult education arranges courses in Hobart in English for migrants and other courses for migrants throughout the State.

The increased range and number of courses continues to respond to the arrivals of migrants and refugees. The Adult Migrant Centre continues to offer a self access learning centre to extend opportunities and encourage migrants to learn English in their own time and at their own pace.

The use of a computer system in the south continues to include staffing and financial information on adult education. Other regions are achieving computerised Adult Education enrolments. The outstanding success of this system attracted considerable interest from other States. Demand for adult literacy programs has increased dramatically with an average of 500 trained volunteers providing instruction in one-to-one teaching situations.

The Northern Region School for Senior Citizens program consists of a variety of subjects from English literature to gardening science.

The diverse summer school program attracts students from throughout Australia. Events such as art exhibitions, music recitals and drama events are often arranged in association with other groups as part of the Division's involvement in community arts.

Discussion groups are held throughout the State on a monthly basis to study books and other material of educational value. This joint service given by the State Library and the Education Department continues to be in keen demand.

'The Grange' Residential College at Campbell Town, with accommodation for 30 students, has been leased from the National Trust since 1964. This old colonial country home built in 1848 is one of only two adult education residential colleges in the country and is recognised by educationalists as an institution of unusual worth. The building is used constantly for weekend courses as well as week-day educational and training programs.

The Statewide Literacy Unit took responsibility for the Colony 47 Reading Unit in October 1983. This community based centre offers an alternative to the general Adult Education Literacy Program. Although the Centre will maintain its community profile and its priority for catering for youth and the handicapped, it is envisaged that its scope in providing Basic Skills courses which integrate learning, reading, writing and basic maths, will widen. Because of their liaison with the Statewide Unit, the Colony 47 Unit will benefit by being drawn into a wide scope of activities and suffer less from its previous isolation.

The Statewide Literacy Unit also took initiative in developing a special Basic Education Program for Aboriginal Adults, which works State-wide.

### **Other Educational Matters**

#### *Curriculum Development*

In recent years the school curriculum has undergone considerable change both in subject matter and teaching methods. While schools have responsibility for developing their own curriculum they operate within subject guidelines and Schools Board requirements. The Curriculum Centre and Subject Supervisors are the two principal groups

responsible for curriculum development. Both respond to schools by the following activities:

- (i) assisting schools with curriculum development and evaluation;
- (ii) the improvement of teaching practices;
- (iii) developing learning material; and
- (iv) contributing to policy making and administrative aspects of curriculum development.

As part of the reorganisation process during 1984 the Curriculum Services Branch will assume these responsibilities.

The Curriculum Centre's purpose is to facilitate the introduction of new ideas and practices to improve children's learning. Tasks which Centre officers are expected to perform can be grouped as follows:

- (i) special projects;
- (ii) involvement with statewide curricula;
- (iii) facilitating school-based curriculum review and development;
- (iv) publications and information.

Most officers are involved, at some time, with all of these tasks, which are inter-related and supportive of each other.

The Curriculum Centre provides assistance to committees which have responsibility to develop or revise state or system-wide guidelines. In recent years system initiatives have resulted in the development of guidelines in areas such as primary language, physical education, primary mathematics, secondary science, consumer education and handwriting. Also, after trials, a Legal Studies Course has received full HSC status. The wide appeal and the innovative teaching methods employed has created high enrolments in this course.

Activities of and funding from agencies external to the system, generate a wide variety of curriculum projects in the Centre; for example:

- (i) Transition from school to post school life (including co-ordination of a state-wide work experience program);
- (ii) Antarctic and Southern Ocean Project;
- (iii) Aboriginals in Tasmania;
- (iv) Education of Girls Projects;
- (v) Multi-cultural Approaches in Tasmanian Education;
- (vi) Bowen Park and Port Arthur Historic Sites;
- (vii) Health Education Projects (Primary and Secondary); and
- (viii) Tasmanian Tourism Education Project.

#### *Professional Development*

The Centre for the Continuing Education of Teachers provides part-time study programs for practising teachers in co-operation with the Education Department, Tasmanian College of Advanced Education and University of Tasmania. Administration of the Centre is undertaken by the Education Department (Services Division) and its formal study program is administered by an executive board representing the Education Department, the institutions providing courses and part-time teaching staff and two teacher organisations.

Courses offered range from basic certification for teachers to advanced level study programs linked with University and TCAE Education Degree courses.

The Department has placed a high priority on development of programs for senior staff. A primary school program commenced in 1980 and is aimed at fostering a better understanding of the education system, of the basic functions and principles of management, to improve confidence and competence in management practices and to enable senior staff to support the development of teachers at the school level.

A similar program for senior-masters and senior-mistresses in secondary schools commenced in 1982. It has been developed in co-operation with the University of Tas-

mania and the Tasmanian College of Advanced Education. The assistance of those institutions also has been offered in a resource teacher program and a conversion (re-training) course to meet specific system needs.

Other development activities are provided in addition to the CCET courses. These consist of a limited number of longer courses of more than ten days, short courses of one to three days, school-based seminars, inter-school visits by teachers and meetings held out-of-school hours.

#### *Media Services*

The Tasmanian Media Centre provides specialised assistance by the development, production, and supply of audio-visual materials and equipment.

The Centre offers the following types of services:

- (i) selection, installation and maintenance of audio-visual equipment in Tasmanian schools;
- (ii) evaluation and purchase of audio-visual media - 16mm films, kits, slides, audio tapes, videotapes - for loan through the Centre's Media Library; resource material is now available for sale;
- (iii) production of audio-visual resource material based on curriculum changes and needs — often in the form of multi-media kits;
- (iv) access sessions, seminars, workshops and a mobile media in-service program to publicise the availability of the Centre's resources and services;
- (v) advice and assistance to individual Tasmanian schools in relation to resource management and organisation.

The Centre also operates two regional annexes in Launceston and Burnie which offer media resources and services to teachers.

#### *Computer Education*

The Education Department of Tasmania's Elizabeth Computer Centre is responsible for supporting the development of computing in Tasmanian schools. Over the years the Centre has expanded into a statewide computer network consisting of more than 225 computer terminals linked to seven computers in Hobart, Launceston, Devonport and Burnie. The network, called TASNET, provides links to all further education and secondary colleges, all high schools, including several district high schools, one primary school, as well as Education Department offices.

Computer terminals are linked to the computers via special-purpose telephone lines, rented on a yearly basis from Telecom. The recurrent expense of Telecom lines (calculated on the distance of the school from the nearest computer) previously has been a major barrier for country schools wishing to join the network.

However, recent advances in electronic technology now provide schools with a suitable solution to this problem without the high cost of line rentals. The microcomputer, a small, portable, stand-alone computer packaged inside a keyboard used for input of data, connected to an ordinary TV screen for output of data, and utilising small floppy disks for storage, now is commercially available at a reasonable cost. There are over 100 microcomputers in schools, with the largest growth area being in the primary sector where schools are using the Computer Assisted Learning (CAL) programs developed by the Elizabeth Computer Centre.

High schools usually have purchased microprocessors in addition to their TASNET terminals. Several district high schools currently are using only microcomputers. However, it is possible for the microprocessor to be linked as a terminal through an acoustic coupler and the ordinary telephone network.

#### *Museum Services*

These services operate from the Tasmanian Museum and Art Gallery (Hobart) and the Queen Victoria Museum and Art Gallery (Launceston). Education Department officers provide support for school visits and develop activity material. Collections in many fields are also offered on loan to schools. A 'travelling service' is also available from both

centres. In the south a 'Musbus' accompanied by an Education Officer brings displays to schools. A railway carriage provides a similar service to schools in the north and north-west.

#### *Library Services*

The Library Services Branch offers expert bibliographic and technical advice to schools. The Branch also provides the administration on standards and policies relating to development of efficient and educationally effective libraries.

A centralised cataloguing service (TASCIS) produces cards for newly acquired publications. This service is available to schools either by way of any computer terminal of the TASNET system or by order from the Branch.

#### *Research*

The Research Branch was established in 1961 and its activities centre around the use of information. In various capacities, Branch members are involved or assist in the collection of information, interpretation and dissemination of information, and development of strategies aimed at using information.

Research investigation and surveys include those aimed at assisting decision-making and policy formation. The Branch also monitors system initiatives such as levels of pupil achievement across the system and establishing data bases for future evaluation. In recent years some of the important research studies include:

- No. 78 — Support for Review and Development — The Role of the Facilitator;
- No. 79 — 1982 Survey of Basic Number Skills of 10 year old Tasmanian Students;
- No. 80 — Temporary Hearing Losses in Infant School Children;
- No. 81 — The Minor Impairments Research Study;
- No. 82 — Retention and Participation in Tasmanian Education;
- No. 83 — Assessing Community Needs for Further Education — A Participative Approach;
- No. 85 — Case Studies of Apprentices under Day and Block Release;
- No. 86 — Class of '81 — Interviews with 179 young people who were in Grade 10 in 1981;
- No. 87 — Resource Teacher Study;
- No. 88 — Integration of Special Children into Ordinary Schools.

The Branch has also participated in a number of national or Commonwealth funded studies in the areas of Transition Education, Minor Impairments Affecting Children and Country Education. Policy support is provided through involvement in departmental or national reviews, and monitoring policy implementation. This includes collecting statistics related to Tasmanian and National planning needs as well as acting in a service capacity for major committees.

Other Branch activities include consultative services for groups and individuals conducting research as well as historical and documented information.

#### *Physical Education*

The Physical Education Branch provides advice and assists with both policy formation and implementation of physical education programs appropriate to the needs of pupils. This assistance includes conducting in-service programs for teachers as well as producing a wide range of curriculum guidelines and resource materials in the areas of dance, health, aquatics, gymnastics, games, athletics and outdoor education.

The Branch also evaluates facilities and equipment required to implement a comprehensive physical education program. This includes development of safety guidelines for the design and layout of playgrounds, swimming pools and achievement tracks.

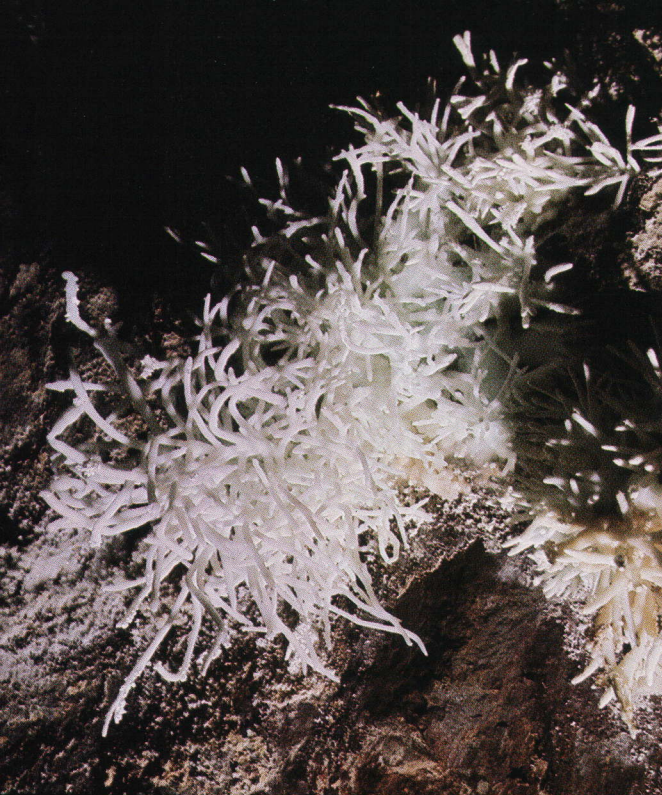




*Kubla Khan, Mole Creek*

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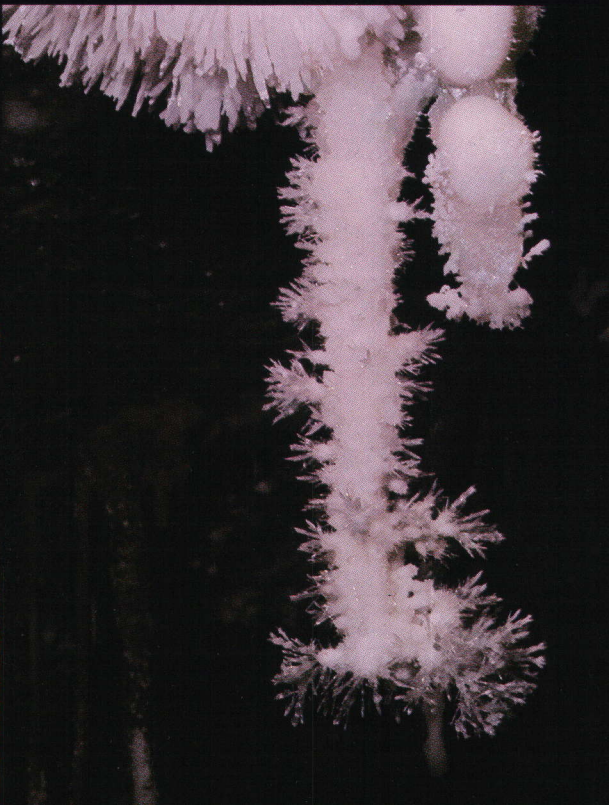


*Herberts Pot, Mole Creek*

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*Herberts Pot, Mole Creek*



*Shiskabab, Mole Creek*





*Georges Cave, Mole Creek*



*Kubla Khan, Mole Creek*

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*Georges Cave, Mole Creek*







*Kubla Khan, Mole Creek*

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In 1982, and previous years, the Branch was responsible for administering the State Learn-to-Swim Campaign, as well as school and community aquatic programs in the Education Department pools at Hobart, Launceston and Ulverstone.

#### *Outdoor and Environmental Education*

Education Department outdoor education and environment centres provide education, leisure, and recreation programs in a variety of environments. Children attend these centres on a daily or residential basis at the following places:

*Hagley Farm Environment Centre* is located 25km west of Launceston on the Bass Highway. Programs are based on a 62 hectare farm owned by the Education Department. The Centre caters for live-in or day visit groups from primary schools and offers three broad areas - natural science, social science and physical education.

*Molesworth Day-Visit Environment Centre* is located 36km north of Hobart in a hop growing region. It provides a base for field explorations through bushland, hopfields and farming areas. The daily programs are integrated into aspects of the curriculum such as mathematics, micro-studies, orienteering, land use, survival and language development.

*Sprent School Farm and Environment Centre* is located 20km south of Ulverstone and caters for live-in and day groups. Programs are based on a 12 hectare school farm and the surrounding environment.

*Waddamana Field Studies Centre* is located in the Central Highlands 140km from Hobart. The centre caters for live-in groups and offers educational, recreational and leisure programs based on the local flora, geology and power station.

*Woodbridge Marine Studies Centre* is located 40km south of Hobart and provides a base for practical marine studies for groups of primary and secondary pupils. Facilities include a laboratory, aquarium, research vessel and small craft. Activities cover a comprehensive range of topics including oceanography, marine biology, navigation and commercial fishing.

#### *Division of Recreation*

In response to the establishment of a Federal Department of Tourism and Recreation and the need for governments to play a more significant role in the provision of leisure opportunities, the Tasmanian Government formed a Division of Recreation as a branch of the Education Department in 1974-75. It was formed to assume prime responsibilities for recreation and compliment the work of existing state departments and agencies. The Division has the responsibility of promoting the physical and social well-being of all sections of the Tasmanian community through policies enhancing motivation, opportunity, support, co-ordination and co-operation rather than control direct.

Division offices are located throughout the State at Hobart, Launceston, Burnie, Devonport, Ulverstone, Smithton and Queenstown. Regional recreational officers provide advice and support to local community groups and agencies.

The Division also has officers with statewide responsibilities for disadvantaged groups, camping, outdoor recreation, research and planning, outdoor education, water safety and sports development. Facilities and equipment are also available for use by community recreation groups. They also ensure that leisure opportunities are planned to provide for equitable and rational distribution of resources which are in accord with community needs.

Co-operation with government and non-government agencies involved with recreation ensures that a variety of recreation and sporting facilities are available to cater for community, regional, State or national needs. This promotes a balance in emphasis between active organised group demands and informal recreation provision.

The Division also supports the development of recreation programs and assists with sports coaching schemes through the provision of information and advice on sources of finance for projects and assessing the merits of applications for programs or capital works grants.

During 1983, the Government's water safety program became the responsibility of the Division of Recreation with the appointment of a State co-ordinator and the establishment of a Water Safety Committee made up of representatives of relevant government departments and community organisations.

Under the International Standard Sports Facilities Programme work commenced on a velodrome at the Kate Reed State Recreation Area, Launceston, and a baseball centre at Kingborough. The rowing course at Lake Barrington has been completed.

In 1983, the computerised Directory of Recreation Organisations which lists over two thousand clubs was promoted throughout Tasmanian schools as a leisure education resource.

A new edition of 'A Child is not a little Adult: Modified Approaches to Sport for Australian Children' was released and it has received wide acclaim from sporting, educational and community groups alike.

## TERTIARY EDUCATION

### University of Tasmania

#### *Founding*

The University of Tasmania was founded in 1890 and was the fourth university to be established in Australia. When teaching began in 1893 with three lecturers and six students, it occupied 1.6 hectares of land on the Queen's Domain at Hobart.

#### *Residential Colleges*

There are three residential colleges in the University. Christ College, affiliated with the University in 1933, was moved to new premises on the University campus at Sandy Bay in 1962 and provides accommodation in single study-bedrooms for 143 male and female students, eight tutors and a deputy warden. St John Fisher College, opened in 1962, accommodates 86 students in single study-bedrooms and is under the direction of the Catholic Church. Jane Franklin Hall was founded by the Tasmanian Council of Churches in 1950 as a hall of residence for women students. The Hall now provides accommodation for 160 male and female students.

#### *Buildings*

The University site at Sandy Bay was chosen in 1944. Until 1957 temporary huts were used extensively, mainly by the rapidly growing science departments. In 1957 the first permanent building was erected and by 1973 all departments of the then eight faculties were housed in permanent buildings.

Since that date the new buildings completed are: a computer centre; a child care centre; a cosmic ray observatory; a sports and recreation centre; and the University Centre which consists of a complex of lecture theatres (which can be combined to form a single 800-seat hall), a fine arts gallery and a classics museum. A major extension to the Arts-Commerce-Education building has been completed as well as a further extension to the Union building. A drama studio was completed during 1981. Hytten Hall, a former student residence was converted to house the Centre for Education.

#### *Finance*

From 1974 the Federal Government assumed full responsibility for tertiary education. Tuition fees were abolished as from 1974 and an assistance scheme was introduced to assist full-time students, subject to a means test.

The following table shows the income and expenditure of the University of Tasmania for recent years:

**University of Tasmania: Income and Expenditure**  
(S'000)

<i>Particulars</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
<i>Income</i>				
Recurrent purposes—				
Federal Government .....	19 241	20 991	27 341	30 900
Other .....	324	303	505	584
Total .....	19 565	21 294	27 846	31 484
Equipment grants—				
Federal Government .....	571	635	724	930
Other .....	1	1	—	1
Total .....	572	636	724	930
Other purposes—				
Halls of residence .....	256	243	—	—
Prizes, scholarships and				
benefactions .....	215	283	1 051	1 326
Research grants .....	999	991	1 163	1 485
Other .....	1 451	1 013	2 177	2 704
Total .....	2 921	2 530	4 391	5 515
Total income .....	23 058	24 460	32 961	37 930
<i>Expenditure</i>				
Recurrent purposes—				
Academic activities (incl.				
research) .....	12 947	13 944	18 353	21 709
Academic services .....	2 270	2 421	3 038	3 510
Student and staff services .....	320	390	476	578
General university services .....	3 906	4 547	r 5 767	7 100
Other .....	251	261	326	96
Total .....	19 694	21 563	r 27 960	32 993
Equipment grants—				
Academic activities (incl.				
research) .....	284	321	384	446
Academic services .....	272	292	366	325
General university services .....	17	37	73	56
Total .....	573	650	823	827
Other purposes—				
Halls of residence .....	266	273	—	—
Prizes, scholarships and				
benefactions .....	205	198	358	625
Research grants .....	858	985	1 146	1 385
Other .....	1 022	1 012	2 839	1 763
Total .....	2 351	2 468	4 343	3 773
Total expenditure .....	22 618	24 681	r 33 126	37 593

*Government of the University*

The governing body of the University is the Council, comprising the Chancellor, the Vice-Chancellor and 29 members, 27 of whom are elected or appointed and two, the Director-General of Education and the Deputy Chairman of the Professorial Board, who are *ex officio*.

The Vice-Chancellor is the chief academic and executive officer. The Professorial Board is the governing body on academic matters.

*Staff and Students*

The following table shows the number of teaching staff and students:

University of Tasmania: Academic Staff and Students Enrolled at 30 April (a)

Particulars	1978	1979	1980	1981	1982	1983
Academic staff—						
Professors .....	38	38	37	39	36	28
Other .....	270.5	263	263.8	334.35	335.9	330.8
Total academic staff .....	308.5	301	300.8	373.35	371.9	358.8
Individual students enrolled .....	3 517	3 435	3 517	5 082	5 210	522.9

(a) Full-time equivalent.

The next table shows student enrolment by course:

University of Tasmania: Enrolments 1983

Course	Students enrolled			
	New enrolments (a)	Total enrolments at 30 April		
		Males	Females	Total
Master and Doctor degrees .....	230	451	201	652
Bachelor degree—				
Agricultural Science .....	23	41	20	61
Fine Art .....	65	89	93	182
Arts .....	370	360	508	868
Commerce .....	176	270	106	376
Economics .....	71	118	41	159
Education .....	217	149	437	586
Special Education .....	8	2	10	12
Engineering .....	80	234	14	248
Surveying .....	22	48	—	48
Law (b) .....	66	110	50	160
Medicine (c) .....	59	176	115	291
Music .....	24	36	52	88
Pharmacy .....	22	27	27	54
Science .....	205	475	158	633
Combined B.A./LL.B. ....	40	64	24	88
Combined B. Ec/LL.B. ....	3	4	5	9
Combined B.Com./LL.B. ....	5	7	4	11
Combined B.Sc/LL.B. ....	4	4	2	6
Combined B.E./BSc .....	2	4	2	6
Total .....	1 462	2 218	1 668	3 886
Non-degree courses—				
Sub-graduate and post-graduate diploma .....	233	126	227	353
Other (d) .....	208	170	168	338
Total .....	441	296	395	691
Total all courses .....	2 133	2 965	2 264	5 229

(a) New enrolments refer to those students who either commenced studies for higher degrees or, being undergraduates, enrolled at the University of Tasmania for the first time in 1983, or transferred from one faculty to another.

(b) Since 1975, students must complete one year in another faculty before starting law.

(c) Students may enrol for an honours degree in Medical Science after completing at least three years of M.B., B.S. course.

(d) Of students classified as 'other' 29 students were enrolled for a master degree qualifying examination. The remainder were enrolled for university subjects but were not proceeding to either a degree or diploma.



*Degrees Conferred*

The following table shows degrees conferred:

University of Tasmania: Degrees Conferred (a) During Year Ended 30 June							
Degree		1978	1979	1980	1981	1982	1983
Higher Degrees							
Higher Doctor .....	Males	2	1	1	—	—	—
	Females	—	—	—	—	—	—
Doctor of Philosophy .....	Males	14	14	20	20	18	17
	Females	4	2	1	3	4	3
Master (b) .....	Males	10	21	6	14	16	41
	Females	5	5	1	5	4	36
Bachelor Degrees (c)					1981	1982	1983
Agricultural Science .....	Males			10	3	5	
	Females			8	3	1	
Fine Art .....	Males			—	7	14	
	Females			—	11	10	
Arts (d) .....	Males			90	70	75	
	Females			114	104	128	
Commerce (d) .....	Males			27	31	35	
	Females			5	8	16	
Economics (d) .....	Males			25	18	21	
	Females			3	4	7	
Education .....	Males			10	32	35	
	Females			20	95	105	
Special Education .....	Males			—	1	—	
	Females			3	1	1	
Engineering .....	Males			22	22	17	
	Females			—	—	—	
Law .....	Males			20	27	27	
	Females			8	7	11	
Medical Science .....	Males			29	36	17	
	Females			10	15	22	
Medicine/Surgery .....	Males			29	27	31	
	Females			7	10	13	
Music .....	Males			—	7	1	
	Females			—	7	6	
Pharmacy .....	Males			7	16	6	
	Females			5	7	8	
Science .....	Males			107	96	91	
	Females			49	40	39	
Surveying .....	Males			14	3	4	
	Females			—	—	—	
Total bachelor degrees .....	Males			390	397	379	
	Females			232	312	367	
Persons				622	709	746	

(a) Excludes honorary degrees.

(b) Increase due substantially to Master's degrees in humanities and social sciences.

(c) Includes bachelor degrees with honours.

(d) Includes combined Law degrees

**Advanced Education in Tasmania***Concept*

Until the late 1960s higher education in Australia had been provided by universities. Some professional courses were also provided by other institutions. In Tasmania technical colleges, in addition to playing their main role in providing apprentice training, trade courses and adult education etc, also provided courses of a professional nature. The

development of colleges of advanced education allowed both a re-organisation and a rationalisation of tertiary education in Australia.

In general terms, colleges of advanced education provide higher education and training with a vocational and applied emphasis. Degree and diploma courses have been developed in a wide range of discipline areas to meet identified community demands.

### *History*

Following a national seminar on planning for colleges of advanced education held in Hobart towards the end of 1967, the educational specifications and a master plan for the Mt Nelson Campus were prepared. In June 1969 the contract for the Resource Materials Centre (Stage 1) of the project was let. Appointment of staff to the College commenced in 1971 and during 1972 the first on-site lectures were held at Mt Nelson. In 1973 a campus of the College was established at Newnham (a suburb of Launceston).

The College has recently undergone significant changes as a result of the rationalisation of tertiary education in Tasmania. This rationalisation began with the Committee on Post-Secondary Education appointed jointly by the Federal and State Governments in April 1975 which recommended major changes in the structure of the College. The proposals included widening the range of courses at the University in Hobart and establishing the Newnham campus of the College as the centre of advanced education in the north of the State. In February 1980 the Tasmanian Government accepted the recommendations of the Tertiary Education Commission of Tasmania on the future training of teachers in Southern Tasmania. As a result the Schools of Teacher Education, Art, Music and Librarianship were transferred to the University from 1 January 1981.

This rationalisation, which resulted in the closure of the Mt Nelson campus, is in keeping with the Tasmanian Government's policy to achieve a balanced development of the three sectors of tertiary education on a geographic basis.

### *Advanced Education Council*

The *Advanced Education Act* 1968 established the Tasmanian Council of Advanced Education. An amendment to this Act now provides for the appointment of 17 members of whom one shall be the person holding the office of the Principal; two shall be officers of the Advanced Education Service (other than the Principal); and two shall be persons undertaking a course of advanced education.

### *The College Today*

The Tasmanian College of Advanced Education is a multi-disciplinary higher education college centred in the Launceston suburb of Newnham. As well as offering full-time and part-time courses at its home campus, the College has also developed a program of external and mixed mode studies to assist students state-wide who cannot attend classes in Launceston.

From 1984, the activities of the College will be carried out within four academic divisions:

- (i) Administrative Studies formed by the School of Business;
- (ii) Arts and Sciences consisting of the Schools of Applied Science, General Studies, Nursing and Social Work;
- (iii) Environmental Design consisting of the Schools of Architecture, Planning and Landscape Architecture, Engineering and Art; and
- (iv) Education formed by the School of Teacher Education.

From 1984, the College will also establish a Centre for Legal Practice within the School of Business, a Centre for Drama and a Centre for Music within the School of General Studies, and a Centre for Physical Education within the School of Teacher Education.

The Divisions are supported by an extensive Library, and modern Computer Centre, as well as Audio-Visual Production, Student Counselling and External Studies Units.

*Students and Courses*

The next table shows total enrolments for a three-year period:

**College of Advanced Education: Enrolments, Tasmania  
(Number)**

Description	1980			1981			1982		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Full-time .....	653	1 153	1 806	374	583	957	378	551	929
Part-time .....	677	443	1 120	661	464	1 125	740	511	1 251
Total .....	1 330	1 596	2 926	1 035	1 047	2 082	1 118	1 062	2 180

Awards are made at four levels; bachelor degree, diploma, graduate diploma and master's degree. The following table shows the number of students enrolled by course in 1982:

**College of Advanced Education: Enrolments by Course, Tasmania, 30 April 1982  
(Number)**

Course	Males	Females	Persons
Master of Education .....	12	12	24
Legal Practice Course .....	29	8	37
Grad. Dip. in Professional Management .....	27	2	g 29
Grad. Dip. in Special Education .....	1	10	11
Grad. Dip. in Art & Craft .....	1	—	1
Grad. Dip. in Architecture .....	23	2	25
Grad. Dip. in Building Operations .....	1	—	1
Grad. Dip. in Landscape Planning .....	3	3	6
Grad. Dip. in Urban Planning .....	16	3	24
Bachelor of Business (Personnel Management and Industrial Relations) .....	23	8	31
Bachelor of Business (Business Administration) .....	51	13	64
Bachelor of Business (Accounting) .....	181	73	254
Bachelor of Business (Public Administration) .....	25	4	29
Bachelor of Business (Accounting and Data Processing) .....	31	5	36
Bachelor of Business (Data Processing) .....	4	—	4
Bachelor of Applied Science (Nursing) .....	1	30	31
Bachelor of Applied Science (Applied Chemistry) .....	12	2	14
Bachelor of Applied Science (Medical Technology) .....	31	32	63
Bachelor of Applied Science (Multi Disciplinary) .....	11	3	14
Engineering Feeder Course .....	11	—	11
Bachelor of Education .....	155	401	556
Bachelor of Education — In Service .....	92	203	295
Bachelor of Arts in Social Work .....	22	53	75
Bachelor of Arts in Environmental Design .....	45	14	59
Diploma of Teaching in TAFE .....	114	25	139
Diploma of Personnel Management & Industrial Relations .....	19	4	23
Diploma of Creative Arts .....	1	5	6
Diploma of Applied Science (Nursing) .....	5	14	19
Diploma of Arts in Art and Craft .....	12	22	34
Diploma of Arts in General Studies .....	52	54	106
Associate Diploma in Computing .....	29	1	30
Associate Diploma in Agricultural Business Management .....	32	9	41
Associate Diploma in Art and Craft .....	14	24	38
Associate Diploma in Music .....	2	6	8
Miscellaneous Students .....	30	17	47
Total enrolments .....	1 118	1 062	2 180

*Teaching Staff*

The next table shows teaching staff by full-time or part-time status:

College of Advanced Education: Teaching Staff (a) Tasmania						
Description .....	1977	1978	1979	1980	1981	1982
Full-time .....	201	210	204	196	123	129
Part-time .....	18	38	31	16	9	9
Total .....	219	248	235	212	132	138

(a) Teaching effort expressed as full-time equivalent units.

*Finance*

At the June 1973 Premiers' Conference the states accepted the Federal Government's offer to assume full financial responsibility for tertiary education from 1 January 1974. (The amounts of recurrent expenditure saved by the states were deducted from their financial assistance grants.) The Federal Government also announced in its 1973-74 Budget the decision to abolish tuition fees.

Prior to 1972-73 Federal Government grants for colleges of advanced education and for teachers' colleges were provided under separate programs, but since then they have both been absorbed into a wider program of grants for advanced education.

**FEDERAL GOVERNMENT ACTIVITIES IN EDUCATION****Introduction**

Under the federal system of government in Australia, the six States and the Northern Territory are responsible for providing education services for their own residents. The Australian Government is responsible for education in the Australian Capital Territory and a few small external territories.

In recent years the Federal Government has provided the state governments with substantial financial assistance specifically for schools, universities, colleges of advanced education and colleges of technical and further education. In addition, the Federal Government has administered Australia-wide schemes of financial assistance for students for many years.

The Federal Government first became directly involved in education when it established an Office of Education in 1945 and a branch was opened in Hobart. However, education remained a state responsibility—the principal functions of the Federal Government's Hobart office were migrant education and administration of Federal Government university scholarships. In 1951 the Hobart office was closed and its functions were transferred to the Tasmanian Department of Education which acted as an agent for the Federal Government. With increased financial involvement in education the Hobart Office was re-opened in 1964. However, education was still primarily a state responsibility.

The portfolio of the Federal Minister for Education and Youth Affairs is composed of the Department of Education and Youth Affairs, the Commonwealth Tertiary Education Commission (assisted by the Universities Council, the Advanced Education Council and the Technical and Further Education Council), the Commonwealth Schools Commission, and the Australian Capital Territory Schools Authority. The Office of Child Care, which advises the Government on support for child care and pre-school education programs, is located within the Department of Social Security.

The Australian Constitution empowers the Commonwealth Government to make special-purpose grants to the States and to place conditions upon such grants. This power has been used to provide financial assistance to the States specifically for educational purposes. There are two national education commissions which advise the Commonwealth Government on the needs of educational institutions throughout Australia for the purposes

of financial assistance: the Commonwealth Schools Commission, which was established in 1973, and the Commonwealth Tertiary Education Commission, which was established in 1977 to replace three former commissions—the Universities Commission; the Commission on Advanced Education and the Technical and Further Education Commission.

Generally, the Commissions are required to consult with State authorities (and, in the case of the Commonwealth Schools Commission, with the authorities conducting non-government schools) and such other persons, bodies and authorities as they think necessary before making recommendations to the Commonwealth Government on the amount of financial assistance required, both in general and for specific purposes, to meet the needs of each sector.

### Department of Education and Youth Affairs

The Department provides advice to the Federal Minister for Education and Youth Affairs on general educational and youth affairs policy measures and the development and investigation of educational policy proposals in new areas. It is involved in the planning and evaluation of the effective use of resources in Australian education and co-ordinates programs of advisory commissions and committees.

The Department is responsible for international relations in education; for example for co-ordinating Australian participation in the educational activities of UNESCO and OECD. It administers schemes of assistance for Australian students and also exchange programs which enable Australians to study overseas and overseas students and educationists to visit Australia. The Department is also responsible for the production of language teaching materials, provides advice on Aboriginal education and provides administrative assistance for a number of advisory committees, and the Australian Council on Awards in Advanced Education.

The Department also provides the secretariat for the Commonwealth Institutions Accreditation Committee for Advanced Education. This Committee co-operates with the Australian Council on Awards in Advanced Education and course accrediting authorities in the States and the Northern Territory to promote consistency in academic awards in colleges of advanced education throughout Australia.

### *Federal Government Assistance for Tertiary and Secondary Students*

The next table shows the number of students in Tasmania who received Federal Government assistance under the various schemes for recent years:

Number of Students in Tasmania Receiving Federal Government Assistance at 30 June						
<i>Scheme</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>
Tertiary education assistance ..	1 797	1 455	1 542	1 569	1 925	2 049
University .....	—	—	—	—	966	1 015
Advanced Education .....	—	—	—	—	288	375
Technical .....	—	—	—	—	671	659
Adult secondary .....	56	57	45	36	35	52
Secondary allowances .....	377	366	402	421	432	861
Post-graduate .....	44	44	40	54	65	72
Aboriginal secondary .....	300	292	306	381	455	513
Aboriginal study .....	22	30	49	42	55	67
Isolated children .....	625	568	469	470	522	613
Total .....	3 221	2 812	2 853	2 973	3 389	4 227

Brief descriptions of the various schemes are given below:

*Tertiary Education Assistance Scheme:* This scheme provides means-tested (non-competitive) allowances to full-time, unbonded students attending approved courses at tertiary institutions. Benefits in 1983 include an allowance, subject to a means test, of up to \$2 010 per year for students living at home; and up to \$3 100 per year for students living away from home and for independent students. Dependants' allowances of \$42.70

per week for a dependent spouse and \$10.00 per week for each dependent child are payable. Also provided are allowances to assist with student union and other incidental fees. The following incidentals allowances are payable in 1983: for students enrolled at universities, \$100; for students at colleges of advanced education, \$70; and for students at technical colleges, \$30.

*Adult Secondary Education Assistance Scheme:* Assistance is available under this scheme for students, aged 19 years or more on January 1 of the year of study, who have had a break from secondary studies and who have returned to undertake full-time or one year matriculation level program or a two year program (if studies beyond Year 10 in the Australian secondary school system have not previously been undertaken) full-time at secondary schools, technical colleges and other approved institutions. In 1983 the maximum allowance for students living at home was \$1 860 per year and up to \$2 867 per year for students living away from home and for independent students.

*Secondary Allowances Scheme:* Families with limited financial resources are assisted under this scheme to maintain their children at school for the final two years of secondary education. For 1982 an allowance of up to \$726 per year was provided on a non-competitive basis subject to family income.

*Post-graduate Awards:* Awards are made annually to enable students to undertake post-graduate studies at an Australian university or college of advanced education. In Tasmania, in 1982, 37 new awards were made available. Selection is made on the basis of ranking by each institution and in the case of course awards and advanced education institutions awards, the final order of merit list is drawn up by a Central Selection Committee. The award, subject to annual renewal, may be held for a maximum of four years in the case of a doctorate degree candidate or two years in the case of a master's candidate. In 1983 award holders receive a living allowance of \$6 850 per year. Provision is also made for assistance with travel, establishment and thesis costs and married award holders may qualify for an allowance in respect of dependants (spouse and children). Allowances are taxable. In 1983 post-graduate students are able to earn \$1 000 from an award provided by a tertiary institution or \$5 000 from a private sector award.

*Aboriginal Grants Schemes:* The Department of Education administers two schemes of assistance for students of Aboriginal descent—the Aboriginal Study Grants Scheme and the Aboriginal Secondary Grants Scheme. Aboriginal study grants assist Aboriginals and Torres Strait Islanders to undertake training and study after leaving school and provide the full-time student with fees and a living allowance. In 1983 married students or students 18 and over receive \$76 per week, while unmarried students under 18 receive \$64 per week. Other special allowances such as establishment and textbook allowances, are also payable, including some benefits to part-time students. The Aboriginal Secondary Grants Scheme provides assistance to Aboriginal or Torres Strait Islander secondary school students to encourage them to obtain a secondary education. The scheme provides a living allowance which, in 1983, was \$376 per year for students in junior grades and \$537 for senior students. Allowances are also payable for the cost of board (in approved cases) school books and clothing, uniforms, fares, fees and other items.

*Assistance for Isolated Children:* This scheme provides financial assistance to enable children living in isolated areas to have access to schooling in the appropriate grade or year. In 1983, boarding allowances were payable of up to \$1 932 a year for a primary pupil, up to \$2 403 a year for a senior secondary student and up to \$2 132 a year for other secondary students including a basic \$866 free of means test. Where a family, in preference to boarding its children away from home, maintained a second home to enable the children to attend school on a daily basis, a second home allowance of between \$866 and \$2 209 per year is paid, depending on the number of children involved. For children who studied by correspondence, an allowance of up to \$500 per child per year is payable.

*National Aboriginal Education Committee:* This Committee was established in March 1977 to advise the Commonwealth Minister for Education and his Department on the educational needs of Aboriginal people and the most appropriate ways of meeting these needs. The National Aboriginal Education Committee is an all-Aboriginal

committee of 19 members who come from all states, including Tasmania as well as the Torres Strait Islands.

### *The Transition from Secondary Education to Employment*

On 22 November 1979, the Commonwealth Ministers for Education and for Employment and Youth Affairs announced that the Commonwealth would provide additional grants to the States to a total of \$150 million over five years for a special Transition from School to Work Program.

In 1980 Tasmania received \$798 000 and \$828 000 in 1981. In 1982 \$900 000 was provided under this program. These funds are provided for the development of programs, in both government and non-government schools and in TAFE colleges, for the extension and diversification of education and training. The program is concerned primarily with improving the employment prospects of young people through appropriate education and training courses.

### **Adult Migrant Education Program**

The Department of Immigration and Ethnic Affairs, in association with the Adult Migrant Education Service of the Tasmanian Division of Further Education, offers statewide opportunities for free English language training. Education services commenced in 1947 and since 1951 the program has been funded by the Federal Government and administered by the State authorities.

The education program offers learning opportunities for both newly-arrived migrants and refugees and for those who have been in Australia for longer than a year. During their first year of residency the students attend courses covering orientation to the Australian Community. A living-allowance may be payable to students attending On-Arrival or full-time On-Going Courses.

The English classes are held during the day and in the evening at different locations throughout the State. The AME Service at 81 Murray Street, Hobart has an excellent library/self-access centre from which books and materials are distributed. Special courses directed to work-related language needs are organised through the Service. Volunteer tutors visit homes under the Home Tutor Scheme. Distance learning lessons are also available.

The level of the courses, length of time over which a course is offered and the appropriate education arrangements depend on language learning needs of the client group, their personal circumstances and educational background. The Education Section of each Regional Office of the Department of Immigration and Ethnic Affairs is responsible for making arrangements with State Adult Migrant Education authorities to provide the best possible learning opportunities for people in various locations.

During the 1982-83 financial year 126 students were enrolled in full-time English courses in Hobart, Launceston and Burnie; 617 in part-time day and evening courses and 36 in correspondence courses. The Home Tutor Scheme using 146 volunteer tutors teaching English on a one-to-one basis, usually in the migrants' homes, attracted 189 new students throughout the year.

### **International Youth Year**

The United Nations has designated 1985 as the International Youth Year (IYY). In Australia the Department of Education and Youth Affairs is taking the co-ordinating role for the IYY. A secretariat has been set up in the Office of Youth Affairs.

The themes set by the UN are participation, development and peace. These call for:

- (i) recognition of young people's ability and judgement;
- (ii) encouragement of the participation of young people in national achievement and development;
- (iii) enhancing the capacity of young people to better their lives and realise their full potential; and

- (iv) ensuring that young people are allowed to grow up in an environment of respect, understanding and equality.

1982-85 is the lead up period to IYY itself. Consultations are already taking place to elicit ideas for IYY.

### **Children's Services**

The Commonwealth Government, through the medium of the Children's Services Program, provides grants to State and local governments and community organisations for the development of services which will enhance the care and development of children and which will support their families.

In Australia the basic responsibility for the regulation, licensing and provision of family and child welfare and early childhood education services lies with the States.

The Commonwealth's intention is to encourage the development of a flexible network of innovative projects in the children's and family service area which complement the activities of state governments and which are directed at groups in the community most in need, including migrant, socially and economically deprived, isolated, aboriginal and handicapped children.

Types of services funded are day care centres, family day care schemes, play group associations, after school and vacation care, occasional and emergency care, youth support and family support. The latter two are administered jointly with the State Government.

### **The Commonwealth Schools Commission**

The Schools Commission was created by the Federal Government as a statutory body under the *Schools Commission Act 1973*. The Commission was preceded by the Interim Committee for the Australian Schools Commission, chaired by Professor Peter Karmel. The Interim Committee reported to the Federal Government in May 1973 in a Report entitled *Schools in Australia*, the major recommendations of which were accepted by the Government. As a result of this Report, funding for Australian schools for 1974 and 1975 was made available by the Federal Parliament which enacted the *States Grants (Schools) Act 1973*. Other Federal Government funds continued to be available under the *States Grants (Schools) Act 1972*. Supplementary grants were made in subsequent amendments to both Acts. Since 1976 yearly allocations have been made under the various *State Grants (Schools Assistance) Acts*.

In broad terms, the functions of the Commission are:

- (i) to report to the Federal Minister of Education, after consultation with interested parties, on the needs of primary and secondary schools and on the priorities that should be given to satisfying those needs;
- (ii) to inquire into and report on important aspects of primary and secondary schooling, with a view to improving the quality of education and the efficient use of resources;
- (iii) to carry out, in conjunction with various schools and school systems, studies aimed at finding solutions to educational problems.

### **State Planning and Finance Committee**

The functions of the State Planning and Finance Committee are to:

- (i) supervise the distribution to non-government schools of Federal Government grants within the State and in particular to recommend subsidy levels for non-systemic schools and report regularly to the Commonwealth Schools Commission on the application of the needs principle in the distribution of block subsidy grants for Catholic systemic schools;
- (ii) establish priorities based on need and make recommendations on applications for building grants from non-government schools;
- (iii) recommend non-systemic non-government schools seeking to be declared as disadvantaged for the purposes of the Disadvantaged Schools Program;



- (iv) examine claims and make recommendations upon applications from non-government schools for short term emergency assistance; and
- (v) advise the Commission on matters affecting the formation and development of non-government schools, and on other matters as referred by the Commission from time to time.

Members are appointed by the Commonwealth Minister for Education with the aim of achieving a broadly representative committee competent to make decisions on priorities and levels of funding in respect of individual schools.

#### *Financial Allocation*

The following table shows the program allocations for 1983:

Commonwealth Schools Commission Programs (a) (\$'000)		
Program	Tasmania	All states
Government schools—		
General recurrent .....	9 536	304 617
English as a second language .....	486	(b) 50 688
Disadvantaged schools .....	662	27 839
Special education .....	647	19 757
Capital grants .....	4 288	143 500
Total .....	15 619	546 401
Non-government schools—		
General recurrent .....	11 081	533 449
Emergency assistance .....	—	590
English as a second language .....	141	16 463 (c)
Disadvantaged schools .....	79	5 037
Special education .....	46	5 251
Capital grants .....	1 435	52 040
Total .....	12 782	612 830
Joint programs—		
Multicultural education—		
General support .....	121	4 194
Ethnic schools .....	—	3 000
Country areas .....	374	9 377
Special education—		
Children in institutions .....	62	2 099
Severely handicapped .....	103	3 427
Professional development—		
Professional development .....	457	17 429
Education centres .....	—	2 194
Projects of national significance .....	—	1 921
Total .....	1 117	43 641
Total all programs .....	29 518	1 202 872

(a) Amounts for 1983 are on an outturn basis.

(b) Includes the estimated \$11 774 000 for ESL new arrivals.

(c) Includes \$659 000 for non-government non-Catholic schools.

#### *Programs for 1983*

The Commission operated 12 main programs during the year. The programs and Tasmania's share of the funds are summarised below:

*General Recurrent Grants Program:* In 1983 \$838 million was allocated nationally to cover staffing and other running costs including teaching materials and property

maintenance. In Tasmania, government schools were allocated \$9.53 million and non-government schools an estimated \$11 million, based on existing funding levels.

The levels of assistance to which a non-government school may be entitled are shown in the following table. (In the case of Catholic and Seventh-Day Adventist Systemic schools a block subsidy grant at one of these levels is given to cover all schools in the system.) In 1982 the six funding levels that applied previously were compressed into three funding groups in the following manner. Basically, levels 1-3 became Group 1, levels 4-5 became Group 2 and level 6 became Group 3.

**1983 Per Capita Subsidies Payable to Non-Government Schools and Percentages of Average Government School Standard Costs (a)**

Group	Primary	Secondary	Percentage of Average Government School Standard Costs
	\$	\$	%
1	338	537	20
2	508	806	30
3	677	1 075	40

(a) Amounts for 1983 are on an outturn basis.

As recommended by the Commission, the Government has decided that new non-systemic schools will now receive supplementary establishment grants for the first four years of their operation to assist with the special costs which accompany the development of a new school. These establishment grants, which will be calculated on a per student basis, will be 10 per cent, 7.5 per cent, 5 per cent and 2.5 per cent of average government school standard costs respectively for each of the first four years of a non-systemic school's existence. The table shows the per student value of these grants in 1983.

**Established Grants Per Student for New Non-Government Non-Systemic Schools, 1983**

Year of operation	Percentage of government standard cost	Grant per primary student	Grant per secondary student
	%	\$	\$
1st Year	10	169	269
2nd Year	7.5	127	202
3rd Year	5	85	134
4th Year	2.5	42	67

*English as a Second Language Program:* This program replaces the Migrant Education Program and has two distinct elements; the bulk of the funds is allocated to develop and improve competence in English of students who come from non English-speaking backgrounds. The remainder of the funds is available to education authorities for the provision of intensive English language programs for refugees and other non English-speaking students who are newly arrived in Australia. In 1983, \$55.37 million was allocated nationally for the first element and \$11.77 million was allocated for the second element. The allocation for Tasmania was \$627 000, with \$486 000 going to government schools and \$121 000 to non-government schools for use under the first element.

*Disadvantaged Schools Program:* In 1983, \$32.87 million was allocated nationally to provide a positive discrimination in favour of those schools declared to be disadvantaged, on the basis of socio-economic background characteristics associated with lower than average school success. The allocation for Tasmania was \$741 000, with \$662 000 going to government schools and \$79 000 to non-government schools.

*Special Education Program:* In 1983, \$25.0 million was allocated nationally to improve the quality and coverage of educational services for handicapped children by supplementing the funding of special education of those children attending special or regular schools or by assisting the integration of handicapped children into regular schools.

The allocation for Tasmania was \$693 000, with \$647 000 going to government schools and \$46 000 to non-government schools for use in both areas.

*Capital Grants Program:* In 1983, \$195.5 million was allocated nationally for building and equipment projects, including refurbishing, upgrading and leasing of facilities. The allocation for Tasmania was \$5.72 million, with \$4.29 million going to government schools and \$1.43 million to non-government schools.

*Multicultural Education Program:* In 1983, \$4.2 million was allocated nationally to support, in particular three major areas of activity: general multicultural education projects including community language teaching programs, small grants projects to school communities and ethnic schools liaison officers. The allocation for Tasmania was \$121 000 to be used jointly in both government and non-government schools.

*Ethnic Schools Program:* This program was introduced in 1981 for an interim two year period to provide assistance to ethnic education authorities conducting part-time courses in community languages. In 1983, \$3.0 million was allocated nationally for eligible schools or insertion classes in regular schools in all States.

*Country Areas Program:* This program replaced the Disadvantaged Country Areas element of the Disadvantaged Schools Program which ceased to operate in 1981. It has three main aims: to alleviate educational disadvantage of country children and their families, to discover better ways of delivering educational services to students in country schools and to provide a framework within which school communities and country people can work co-operatively to improve education opportunities for country children. In 1983, \$9.37 million was allocated nationally for declared country areas. The allocation for Tasmania was \$374 000 for joint use in both government and non-government schools.

*Children in Residential Institutions Program:* This program was previously an element of the Special Education Program. In 1983, \$2.1 million was allocated nationally to provide supplementary educational support to residential institutions and opportunities for broadening the general experience of the children in the outside community. The allocation for Tasmania was \$62 000 to be used in eligible institutions.

*Severely Handicapped Childrens Program:* This new program has been introduced to provide educational programs for children with severe developmental disabilities and for whom educational services are either not available or are very limited. In 1983, \$3.42 million was allocated nationally to support the development and implementation of planned educational programs including identification of children at home and training of personnel; and the assessment of the application of learning and teaching aids. The allocation for Tasmania was \$103 000 to be administered by a joint committee representing government and non-government sectors, agencies and interested organisations.

*Professional Development Program:* This program replaced the Services and Development Program which has been renamed. In 1983, \$17.42 million was allocated nationally to support professional development programs for teachers and support staff, and for activities for parents and other community members designed to assist them in school-based decision making and school improvement efforts. The allocation for Tasmania was \$457 000 for teacher development and associated activities. An additional \$2.19 million was allocated nationally for education centres which complement the thrust of the Professional Development Program.

*Projects of National Significance Program:* This program incorporated the former Special Projects Program and an element transferred from the Multicultural Education Program. In 1983 \$1.92 million was allocated nationally to support a series of policy development proposals in areas identified by the Commission as having priority. The allocations for the eight elements of the program were; \$365 000 for Multicultural Education, \$332 000 for Choice and Diversity in Government School Systems, \$100 000 for Education of Girls, \$100 000 for Gifted and Talented Children, \$166 000 for the Schools Exchange and Travel Scheme, \$166 000 for School Evaluation, \$100 000 for School and Community and \$592 000 for General Projects.

### Commonwealth Tertiary Education Commission

In April 1977, the Commonwealth Parliament passed legislation to establish a Tertiary Education Commission. The Commission, which commenced operation on 22 June 1977, replaced the three existing tertiary commissions — the Universities Commission, the Commission on Advanced Education, and the Technical and Further Education Commission.

The role of the Commonwealth Tertiary Education Commission is to develop and recommend policies for Commonwealth financial support to the States across the range of post-secondary institutions. Under its Act, the Commission is required to perform its functions with the object of promoting the balanced and co-ordinated development of the provision of tertiary education in Australia and the diversification of opportunities for tertiary education. The Commission is assisted in its work by three statutory Councils concerned with universities, advanced education, and technical and further education.

#### *Financing of Tertiary Education*

Commonwealth Government assistance to the States for universities dated from 1951-52. Grants for colleges of advanced education were made from the beginning of the 1967-69 triennium. Broadly speaking, these grants were provided on a matching basis (joint Commonwealth and State expenditure). The Commonwealth Government first became involved in the provision of grants for technical and further education in 1964 when a scheme of unmatched capital grants to the States was introduced.

Since 1974 the Commonwealth has, with the agreement of the States, accepted full responsibility for financial assistance to universities and colleges of advanced education. Following the establishment of the Commonwealth Tertiary Education Commission, grants for these two sectors were provided under the *States Grants (Tertiary Education Assistance) Act* 1977 for the year 1978, and for the triennia 1979-81 and 1982-84 under the *States Grants (Tertiary Education Assistance) Acts* 1978 and 1981. Generally, recurrent grants are appropriated on a triennial basis while capital and equipment grants are appropriated on an annual basis.

All Commonwealth grants for TAFE are appropriated on an annual basis and are also included in the *States Grants (Tertiary Education Assistance) Acts*.

The following table sets out Federal Government payments to Tasmania for university education, advanced education and technical and further education for recent years:

Federal Government Payments to Tasmania  
for Tertiary Education  
(\$'000)

Sector	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
University—						
Recurrent .....	r 17 234	r 18 315	r 20 227	r 24 740	r 30 403	32 310
Capital (a) .....	r 1 008	r 788	r 918	r 1 043	r 1 345	1 404
Advanced Education—						
Recurrent .....	9 256	9 436	10 068	8 739	8 323	9 459
Capital (a) .....	1 598	3 221	810	952	377	405
TAFE—						
Recurrent .....	1 110	1 673	2 005	r 2 154	2 600	3 200
Capital (a) .....	1 970	394	3 400	4 772	3 483	3 490

(a) Includes grants for equipment.

## STATE LIBRARY OF TASMANIA

### General

The State Library of Tasmania was created in 1943 under the *Libraries Act 1943* from the former Tasmanian Public Library which was formed in 1849. The purpose of the State Library is to provide a comprehensive library and information service to all sections of the Tasmanian community.

### *Information Services*

A primary role of the State Library is the collection and dissemination of information. From its original role as a repository of knowledge the public library has assumed the wider responsibility of collecting and making readily available a wide range of information from many sources. During the 1970s rapid developments in information retrieval using computer and communications technology applications have dramatically increased the library's ability to store and access information in response to the growing public need and demand.

As a major source of information in Tasmania the State Library was one of the first public libraries in Australia to provide on-line information access as a normal part of its reference services. In 1977 the State Library installed its first visual display unit as part of the inauguration of the AUSINET computer-based Australian information network. In 1979 a second terminal allowed on-line searching of the large array of North American data bases available on Lockheed Aircraft Corporation's DIALOG system and System Development Corporation's ORBIT.

These tools have enabled the Library to significantly improve its capacity to provide information services in science and technology. Most of the use made of DIALOG has been for government departments and agencies, and for people in business and industry who are involved in establishing new enterprises or in extending and improving existing ones.

Within Tasmania the State Library has inaugurated a computer based community information index (TICO) and co-operates widely with other community, business and government organisations. The Library's information service extends to all parts of the State through the regional framework outlined below. The State Library is also actively planning the improvement of information services to government agencies and is developing its support for the school and college library network. It works closely with the libraries at the TCAE and the University of Tasmania and has extensive links with libraries on the Australian mainland and overseas.

### *Lending Services*

Through a regional library system comprising over 90 service points and bookmobiles the State Library provides approximately 1 086 000 lending items including books, records, cassettes, recorded books, film, audio visual kits, periodicals and other library materials. Annual loans of these items exceed 4.4 million. Prominent among the library's lending services are those to the housebound, the sight handicapped, migrant groups and young children.

### *Organisation*

The State Library Service is administered from its headquarters in Hobart through seven divisions within which related services and functions are grouped as follows:

### *Regional Library Services*

Regional services are provided by the Hobart Lending Library and six Regional Library Systems each of which is responsible for the management of all public library services within the municipalities forming its particular region.

*Channel Regional Library System:* This serves 27 000 people centred on Kingston from a temporary central library.

*Derwent Regional Library System:* Serves 68 000 people centred on Glenorchy. A new central building for the region opened in January 1979.

*Hellyer Regional Library System:* serves 61 000 people in the north-west and west coast from a modern central building in Burnie.

*Mersey Regional Library System:* serves 47 000 people in the central north coast. A new regional library headquarters opened at Devonport in 1983.

*Northern Regional Library System:* serves 118 000 people from a modern central library in Launceston.

*Tasman Regional Library System:* serves 57 000 people in eastern Tasmania from temporary premises at Bellerive. A site for a regional headquarters building is under investigation.

*Hobart Lending Library:* provides a service to over 33 000 borrowers from the headquarters library.

*Performing Arts Collection:* contains over 6 900 films and approximately 150 000 records and cassette tapes. Films and records are available for borrowing by individuals and organisations.

The following table shows the distribution of branch libraries, depots, bookmobiles and books held throughout these regions and in the State Headquarters.

Public Libraries, Tasmania, 30 June 1983

Regional System	Buildings			Book-mobiles	Items held ('000)	Items borrowed ('000)
	Central	Branch	Depots (a)			
State Library Headquarters—	1					
State Reference Library .....					183	—
Special Collections .....					34	—
Reserve Collections .....					113	—
Hobart Lending Library .....					244	730
Channel Region .....	—	6	—	1	72	325
Derwent Region .....	1	15	1	1	129	753
Hellyer Region .....	1	14	—	1	165	559
Mersey Region .....	1	5	1	1	67	361
Northern Region .....	1	23	6	2	262	1 187
Tasman Region .....	—	9	—	1	83	500
Total .....	5	72	8	7	1 352	4 415

(a) Comprises a small collection of materials not housed in a separate building or room.

### Reference and Information Services

*State Reference Library:* Coordinates information services throughout the system. Special attention is given to the needs of research workers in both the public and private sector. A large collection of directories, indexes, abstracting tools and computerised data bases are available in addition to the holdings of books, periodicals, newspapers, maps and other items.

*Government Department Libraries:* The State Library assists and coordinates the provision of an information service to government agencies.

*Special Collections:* The State Library houses unique collections of books and documents relating to Tasmania. These collections include: (i) the Tasmanian Collection - a definitive collection of books published in Tasmania; (ii) the W.L. Crowther Library - a large research collection of books, pamphlets and other items relating to Tasmania and Australia; and (iii) the Allport Library and Museum of Fine Arts - comprising a collection of antique furniture, china, glass, silver, pictures, prints and rare books in fine editions.

*Parliamentary Library:* A legislative reference service is provided to both Houses in association with the Parliamentary Library Committee.

#### *Technical Services*

This Division controls the selection, purchase and disposition of all materials throughout the system in close consultation with specialist and regional staff, and is responsible for the acquisition, cataloguing and classification of all materials added to the State Library. Extensive use is made of computer technology. Book binding and the conservation of library materials form two important activities within the Division.

#### *Archives Office*

Under the *Archives Act* 1983 the Archives Office of Tasmania is the official repository for all non-current State and local government records. A considerable quantity of private records of individuals, companies, associations, societies, and institutions is also held. Public research facilities are provided.

#### *School Libraries*

The Library Services Branch of the Education Department of Tasmania is also housed in the State Library building. This Branch, previously known as the Education Division, is responsible for: (i) developing effective library support services to schools; (ii) consultancy and advisory services on library matters in all educational areas; and (iii) liaison with all appropriate branches of the Education Department.

#### *Central Microfilm Bureau*

The Bureau provides advice on the use of microform systems and associated equipment in government departments, local government and the private sector. Services also include the production of microformats to Australian Standard Specifications.

#### *Management Services*

This section is responsible for the provision of secretariat services for the State Library, the initiation and co-ordination of policy, research and development advice on expenditure priorities, the co-ordination of systems planning and implementation, staff development and publicity.

#### *Administration*

The administration is responsible for advising the State Librarian and other senior officers on staffing, finance, and general administration matters.

#### *Expenditure*

The following table shows the main expenditure items for the State Library Department for recent years:

State Library Department Expenditure, Tasmania  
(S'000)

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Salaries and pay-roll tax .....	3 067	3 540	3 896	4 572	5 154	5 531
Purchase of books, etc .....	910	893	1 046	839	914	993
Other .....	893	1 211	1 279	1 214	1 299	1 602
<b>Total expenditure .....</b>	<b>4 870</b>	<b>5 644</b>	<b>6 221</b>	<b>6 625</b>	<b>7 367</b>	<b>8 126</b>

## CULTURAL ACTIVITIES

### Tasmanian Museum and Art Gallery

#### *History*

The Tasmanian Museum and Art Gallery has its origins in early scientific groups formed in Hobart Town in the 1820s and 1830s. In 1853 the Royal Society of Tasmania established a museum which was later vested in a Government Board of Trustees in 1885. The first building on the present site, on the corner of Argyle and Macquarie Streets, was designed by the city's best-known colonial architect, Henry Hunter (1832-1892), and completed in 1863. Later additions were made in 1889, 1901, 1966 and 1979. The income of the Museum is provided mainly by an annual grant from the State Government.

#### *Activities*

The Tasmanian Museum and Art Gallery houses collections in the fields of fine and applied art, zoology, geology, botany, history, anthropology and applied science. It is an integrated institution concerned with the whole range of natural and human heritage with particular emphasis on Tasmanian exhibits.

The Museum's traditional function, and still the major part of its operation today, is to collect, conserve, study and display items of cultural or scientific value to the community. It now performs a wide variety of additional roles, which include a continuing program of travelling exhibitions and a school education service which utilises the *Musbus*, a van specially equipped for transporting museum displays.

Curators, in addition to working on collections and research on related subjects, handle public inquiries which touch on their fields. Display staff are responsible for installing museum displays, publicity and museum publications. The Museum also employs experts in art conservation and taxidermy. The Tasmanian Herbarium, currently housed in the Botany Department of the University of Tasmania, is part of the Museum.

#### *Collections*

*Art:* The Gallery has a comprehensive collection of Australian paintings, drawings, prints and sculpture from the early nineteenth century to the present day. The collection places particular emphasis on art of the colonial period in Tasmania, with large groups of paintings by Glover, Duterrau, Bull, Gould, Wainwright, de Wesselow, T.E. Chapman, Louisa Anne Meredith, Skinner Prout and others. There are also some important European works of the nineteenth and early twentieth centuries by Beechey, Bougeureau, Poynter, Rodin, Epstein, Sickert and Gilman. The collection of eighteenth and nineteenth century English watercolours is one of the finest in Australia. The Gallery also collects nineteenth and twentieth century prints and photographs.

The applied arts collection includes nineteenth century European and Australian costumes, silver, china and glass and a collection of contemporary Australian ceramics and works in metals and fibres. Asian material includes a collection of jade carvings and Japanese netsuke.

*History:* The presentation of colonial history is highlighted by articles such as Andrew Bent's press of c. 1825 and Lady Franklin's sedan chair (c. 1840), and by a comprehensive maritime (including whaling) collection. A photograph collection covers the period from the mid-1850s to the present day. Coins and medals, including a collection of Greek, Roman and early British coins, and early time-pieces are other notable historical collections.

*Anthropology:* Tasmanian Aboriginal culture is represented by tools and artifacts, and rock carvings from Mount Cameron West in north-western Tasmania. There is a Melanesian collection assembled earlier this century, and representative Australian material.

*Zoology:* Present displays of vertebrate animals feature Tasmania's land mammals and birds, together with reptiles and marine life. Tasmanian invertebrates on show include



insects, spiders, crabs, mollusc shells and sea stars. An extensive reference collection of Tasmanian animals is maintained for scientific study. The Museum safeguards many type specimens (original examples on which description of new species have been based).

**Geology:** Rocks, minerals and fossils of predominantly Tasmanian origin are on display. Notable exhibits include the skeletons of *Wynyardia*, the 20-million-year-old marsupial from Wynyard, and *Zygomaturus*, a giant marsupial, and the world famous mineral crocoite from Tasmania's west coast. The reference collection houses rocks and minerals, including the Petterd Mineral Collection, and fossils, which include many type specimens, mostly from Tasmania.

**Botany:** The Herbarium is at present housed at the University of Tasmania. It includes specimens collected early in Tasmania's history by R. C. Gunn, many of which are type specimens. Other early collectors represented include Archer, Meredith, Milligan, Stuart and Spicer. The Herbarium's current holdings number about 90 000 specimens of Tasmanian plants.

### Queen Victoria Museum and Art Gallery

The Queen Victoria Museum and Art Gallery was established by the Tasmanian Government in 1891. Since 1895 it has been vested in the Launceston Corporation and has received an annual State Government grant. It serves the northern half of Tasmania and its public galleries contain collections and exhibits of special relevance to the natural and cultural environment of Tasmania. Educational, research and information services are provided.

The Museum operates a Zeiss Medium-type Planetarium seating 66 people in a comfortable, air-conditioned auditorium beneath a celestial dome eight metres in diameter. Various sessions are conducted for the general public and for school groups. It has its own air-conditioned theatre seating 166 people and a reference library of scientific and historical books and journals. The arms and armour collection is one of the finest in Australia and there are also extensive collections of Tasmanian animals, plants, artifacts, geological specimens, historical material, craft, decorative art and fine art.

The education office of the Queen Victoria Museum and Art Gallery provides a service to schools throughout northern Tasmania, lending a wide range of items for teaching aids and assisting with teaching programs in the public galleries. It also operates a caravan fitted out to display Museum materials which is stationed for short periods at various towns in northern and north-western Tasmania. In addition, with the assistance of the Australian National Railways Commission, it also operates a railcar fitted out to display Museum materials which will be stationed at various towns in the north and north-west of the State which are serviced by rail. Though primarily designed as teaching aids for district schools, they are also open to the general public.

The Museum's main annexe is Macquarie House in Launceston's Civic Square. The displays within Macquarie House centre on Launceston's history, through the eyes of its architecture. As well, the two annexes at Launceston's Cataract Gorge, the Band Rotunda and the Gorge Interpretation Centre, have displays emphasising the historic, recreational and cultural importance of the Gorge to the Launceston community.

In addition to the Director there are seven curatorial staff and 22 other staff members. Research is undertaken both in the field and in the institution. The results of such programs are regularly published in the Museum's own journal, *Records of the Queen Victoria Museum*, and other research publications.

### The Performing Arts

The organisation and presentation of the performing arts in Tasmania has been subject to a process of continual change. During the early 1970s, four performing arts companies were set up and subsequently funded by both Federal and State Governments. They were the Tasmanian Theatre Company, Tasmanian Opera Company, Tasmanian

Ballet Company and Tasmanian Puppet Theatre. However, by 1976 it was apparent that the maintenance of full-time drama, opera and dance companies in Tasmania was not feasible considering the subsidies available and the population of the island.

In 1977, the Tasmanian Theatre Company adopted an entrepreneurial role by promoting tours of Tasmania by other theatrical companies from Australia and overseas. In 1978, following the termination of the Tasmanian Opera Company and the discontinuance of Federal Government grants to the Tasmanian Ballet Company, the Tasmanian Theatre Company widened its theatrical interests, to include music and dance in its presentations. In 1979, following an initiative from the Minister for the Arts, the Tasmanian Theatre Company co-ordinated and promoted a full 12-month program of drama, opera and dance in Tasmania.

In 1976 the Tasmanian Theatre Company's youth activities became a separate identity and now operates as the Salamanca Theatre Company, presenting a theatre-in-education program throughout the State. The Tasmanian Arts Council is an entrepreneurial body mainly involved in operating a touring program to schools and country areas.

In 1980, the Tasmanian Ballet Company and the Tasmanian Puppet Theatre were wound up. In their place, the new Tasmanian Dance Company presents a dance-in-education program, the first of its kind in Australia. The Terrapin Puppet Company was formed to tour puppet presentations to schools. Until 1984, the Polygon Theatre Company presented adult and curriculum plays with Tasmanian actors.

From 1984, an interim arrangement operates to combine the past functions of the Tasmanian Theatre Company and the Polygon Theatre Company together with the management of the Theatre Royal, Hobart. A new body called the Tasmanian Theatre Trust will be set up by the State Government to formalise this arrangement.

### *Music*

The Australian Broadcasting Commission maintains the Tasmanian Symphony Orchestra which is resident at the Odeon Theatre, Hobart, the only concert venue owned by the ABC in Australia. The Tasmanian Symphony Orchestra presents concert series for adult and youth audiences, special performances for schools and accompanies visiting professional opera companies. In 1979 the Orchestra accompanied the Australian Ballet in performances in Greece and Israel. The Orchestra plays for theatre performances of the Victoria State Opera.

Music Viva presents a comprehensive chamber music program at the University Centre, Hobart and a smaller program in the north and north-west of the State.

A recently formed Tasmanian Chamber Orchestra is resident in Hobart.

Professional training is offered at the Conservatorium of Music. Artists in residence at the Conservatorium form the Petra String Quartet which tours Tasmania and the mainland encompassing the school, college, conservatorium and university circuits.

### *Funding Bodies*

Funds are made available to performing arts organisations through the Theatre, Music and Community Arts Boards of the Australia Council and through the Tasmanian Arts Advisory Board. The Tasmanian Arts Advisory Board consists of up to six members and a Chairman appointed by the Tasmanian Minister responsible for the Arts.

### *Theatres*

*Theatre Royal, Hobart:* This theatre, which opened in 1837, is the oldest theatre in Australia. There are three levels of audience seating: stalls, dress circle with two boxes and an upper circle, with a total capacity of 743. Finance available from Federal and State Governments over the last eight years has enabled extensive maintenance to be done and backstage additions, including new dressing rooms, office facilities and a new heating system, have been commenced. The Theatre Royal is managed by the Theatre Royal Board which is appointed by the Tasmanian Government.

*Princess Theatre, Launceston:* This is the largest theatre in Tasmania, seating 1 072 on two levels—stalls and dress circle. It was built for live theatre in 1911, and was also used extensively as a cinema for many years. In 1970 it was purchased by the Launceston City Council and renovated as a live theatre with modern dressing rooms and facilities. Extensions and alterations since then include the installation of a full counterweight system and interior decoration. The Princess Theatre is managed by the Launceston City Council.

*Civic Centre, Burnie:* This is a new complex built by the Burnie Council and completed in 1976. It features an art gallery, the Town Hall and a theatre. The auditorium of the Civic Theatre seats 418 on one level.

*Town Hall Theatre, Devonport:* Newly converted into a raked auditorium on one level, this theatre seats 470.

#### Further References

##### *ABS Publications Produced by the Tasmanian Office*

- Government Schools, Tasmania (4204.6), annual.
- Non-Government Schools, Tasmania (4205.6), annual.
- Tertiary Education, Tasmania (4203.6), annual.

##### *ABS Publications Produced by the Canberra Office*

- National Schools Collection: Government Schools, Australia (4215.0), annual.
- School Enrolments, Australia (Preliminary) (4201.0), annual.
- Colleges of Advanced Education, Australia (Preliminary) (4205.0), annual.
- Colleges of Advanced Education, Australia (4206.0), annual.
- University Statistics, Australia (Preliminary) (4207.0), annual.
- University Statistics, Part 1: Students (4208.0), annual.
- University Statistics, Part 2: Staff and Libraries (4209.0), annual.
- Education Experience and Intentions Survey, Australia (Preliminary) (4211.0), sole issue, 1979, released October 1980.
- Expenditure on Education, Australia (5510.0), annual.

##### *Other Publications*

- Annual Reports of the Education Department, Tasmania (Government Printer, Hobart).

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## Chapter 8

### SOCIAL WELFARE AND HEALTH SERVICES

#### WELFARE

##### Introduction

In Australia, the principal social welfare benefits are provided by the Federal Government under the *Social Security Act* 1947, as amended, which is administered by the Federal Department of Social Security. Finance for the benefits is provided from the National Welfare Fund which is augmented each year from the Consolidated Revenue Fund by an amount equal to the payments made.

State social welfare, which covers child welfare and relief, is administered by the State Department for Community Welfare.

##### Federal Department of Social Security

The following table shows expenditure in Tasmania from the National Welfare Fund on benefits under the Federal *Social Security Act*:

Social Security Payments Under the Social Security Act, Tasmania  
(\$'000)

Benefit or service	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Age and invalid pensions (a)	107 203	117 678	127 382	142 519	163 130	176 095
Widows' pensions	14 660	16 621	18 844	21 003	23 160	24 187
Supporting parent's benefit (b)	6 573	7 494	8 301	13 591	20 139	22 109
Maternity allowances	213	(c) 91	—	—	—	—
Family allowances (d)	30 968	(e) 28 924	30 549	27 765	30 320	39 146
Handicapped child's allowance	385	407	481	529	689	839
Double orphan's pension	52	54	57	53	62	84
Unemployment benefits	23 398	28 609	29 665	34 658	49 233	78 302
Sickness benefits	2 385	2 024	2 299	2 901	3 595	4 618
Special benefit	804	1 299	1 487	2 372	2 956	3 428
Rehabilitation services	461	519	805	1 592	1 456	2 080
Sheltered employment allowances	637	745	1 064	1 386	1 731	1 942
Funeral benefit	43	39	42	43	42	44
Total	187 782	204 504	220 976	248 412	296 513	352 874

(a) Includes wives' pensions.

(b) Prior to November 1977, benefit was payable to supporting mothers only.

(c) Payments in respect of births occurring prior to 1 November 1978.

(d) Family allowances replaced child endowment and student endowment from July 1976.

(e) Payments affected by change in eligibility of students receiving payments from Commonwealth education schemes and rescheduling of payment dates associated with the change from four weekly to monthly payments.

Federal activity in social services began with the passage of the Federal *Invalid and Old Age Pensions Act* 1909. This and the *Maternity Allowances Act* were administered by the Department of the Treasury until 1941 when the Department of Social Services commenced to function as a separate organisation. Later, the functions of the Department were widened with the passing of the *Child Endowment Act*, the *Widows' Pensions Act*

and the *Unemployment and Sickness Benefits Act*. A referendum held in 1946 empowered the Federal Government to legislate for the provision of certain social services formerly provided by the states. In 1947, a consolidated *Social Services Act* was passed. Other major acts administered by the Department include the *Aged or Disabled Persons Homes Act* 1954, the *Handicapped Persons Assistance Act* 1974, and the *Homeless Persons Assistance Act* 1974.

### *Pensions and Benefits*

Social Security benefit rates which applied as the result of recent legislation are set out in the next table:

**Social Security Benefits, 1983: Maximum Rates, Tasmania**  
(**\$ Per Week Unless Noted as Monthly Payments**)

<i>Benefit</i>	<i>May 1983 amending legislation</i>	<i>Nov. 1983 amending legislation</i>
Age and invalid pensions and sheltered employment allowances—		
Single person .....	82.35	85.90
Single person with dependent child or children (a) .....	88.35	91.90
Married couple (both eligible and living together), each (b) ...	68.65	71.60
Wife (if not a pensioner) .....	68.65	71.60
Widows' pensions—		
Class A (widows with dependent child or children) (a) .....	88.35	91.90
Class B .....	82.35	85.90
Class C .....	82.35	85.90
Supporting parent's benefit (a) .....	88.35	91.90
Unemployment, sickness and special benefits—		
Single person (under 18 years) .....	40.00	45.00
Single person (18 years and over)—		
Sickness beneficiaries .....	82.35	85.90
Others with no dependants .....	68.65	73.60
Others with at least one dependant .....	82.35	85.90
Married couple (total) .....	137.30	143.20
Additional pension or benefit for each child (c) .....	10.00	12.00
Supplementary assistance/allowance (d) .....	10.00	10.00
Family allowances (monthly rates)—		
One child .....	22.80	22.80
Two children .....	55.35	55.35
Three children .....	94.35	94.35
Four children .....	133.35	133.35
For each subsequent child .....	45.55	45.55
Handicapped child's allowance (monthly rates) .....	85.00	85.00
Double orphan's pension (monthly rates) .....	55.70	55.70
Funeral benefit (single lump sum payment) (e) .....	40.00	40.00

(a) Includes mother's/guardian's allowance of \$6.00 a week. This allowance is now payable at the rate of \$8.00 a week. Also eligible for payment of \$12 per week for each child.

(b) Where pensioner couples are living apart because of illness or infirmity, they each may be paid at the single rate.

(c) Paid to a pensioner or beneficiary in respect of each child under 16 years and each full time student aged 16 to 24 years who is wholly or substantially dependent on that person.

(d) Paid to pensioners, supporting parent beneficiaries and to sickness beneficiaries (who have been receiving the benefit for a continuous period of six weeks) who pay for lodgings or rent and who have little or no income apart from their pension or benefit.

(e) If the person liable for the funeral costs is not a pensioner, the funeral benefit will be \$20.

In the previous table a description was given of the various Social Security pensions, benefits, etc. The rates and conditions are varied from time to time by amending legislation. Currently twice yearly, automatic indexation adjustments are made to most pensions and benefits. The Federal Treasurer outlines social security proposals in his budget and these are implemented in later acts.

### *Income Test*

The same income test applies with respect to all pensions and supporting parent's benefit. Blind persons, however, may receive the maximum rate of pension free of the income test. Unemployment and sickness benefits and eligibility for fringe benefits and supplementary assistance are subject to different income tests.

### *Age and Invalid Pensions*

Generally, pensions are payable to persons who have been resident in Australia, New Zealand or the United Kingdom for 10 years. (Reciprocal agreements exist with New Zealand and the United Kingdom.)

The qualifying ages for aged pensions are 65 years for men and 60 years for women; invalid pensions are payable to persons over 16 years of age who are permanently incapacitated for work (to the extent of at least 85 per cent) or are permanently blind. Sheltered employment allowance is paid as an alternative to the invalid pension to invalids who take work in approved sheltered employment. Additional allowances are payable for dependants under certain conditions.

Under the income test, the maximum rate of pension is reduced by \$1 for every \$2 by which income as assessed exceeds the 'free' areas of \$30 per week for a single person and \$50 for a married couple.

The 1973 Budget abolished the means test for all people aged 75 years or more and an amending Act passed in April 1975 abolished the means test for all persons aged 70 years or more. From August 1978, the income test has been re-introduced for all pensions except in cases of persons who are permanently blind. However, the income test was not to apply to persons aged over 70 in respect of the level of pension received in August 1978 but pension increases for such persons are subject to the income test.

On the death of one of a married pensioner couple, the survivor receives six fortnightly instalments at the married couple rate before reduction to the single rate.

### *Spouse Carer's Pension*

A new pension was announced in August 1983 to assist men providing long term care for a wife who has a severe disability and receives an age or invalid pension (or a rehabilitation allowance in lieu of invalid pension). It will not be payable to men receiving a Social Security or service pension or a rehabilitation or sheltered employment allowance. Otherwise, same conditions (and rate of payment) that apply to a wife's pension.

Department of Veterans' Affairs provide a similar payment for men caring for a spouse in receipt of a service pension in her own right.

### *Wives' Pensions*

Where the wife of an age or invalid pensioner is not qualified for an age or invalid pension in her own right, and she is not a service pensioner, she may receive a wife's pension.

### *Widows' Pensions*

These were first introduced in 1942. If the claimant and her husband were not residing permanently in Australia when she became a widow, the claimant must have resided in Australia for five years immediately prior to the claim, or must have resided in Australia for a continuous period of 10 years at any time. (Reciprocal agreements exist with New Zealand and the United Kingdom.)

The classes of widows are as follows: (i) a class A widow has one or more dependent or student children in her care; (ii) a class B widow is at least 50 years of age, or 45 years when her class A pension ceases (because she no longer has a child in her care); and (iii) a class C widow is under 50, without children, and in necessitous circumstances in the 26 weeks following her husband's death. The term 'widow' includes a deserted wife, a divorcee and a woman whose husband has been imprisoned for at least six months. Certain 'dependent females' may also qualify for pension.

*Supporting Parents' Benefit*

Supporting mother's benefit was introduced in 1973 and was extended in 1977 to include males and renamed supporting parent's benefit. The benefit may be payable to a person who has the custody, care and control of a child and who is a male divorcee, a widower, a separated husband or wife or a separated defacto husband or wife. The benefit may also be payable to an unmarried parent or a sole parent who supports a child for any other reason and who does not qualify for a widow's pension.

From 1 December 1983, the benefit was extended to include a parent with no other benefit or pension caring for a child whilst the spouse is hospitalised or in a nursing home on a long term basis, and to a sole parent with an adopted child.

Amending legislation, effective from 1 November 1980, removed the six months' qualifying period for the commencement of a supporting parent's benefit. The benefit is now payable from the first benefit payday after the event which gave rise to eligibility, e.g. separation or birth of a child. This change not only had the immediate effect of increasing the number of claimants for supporting parent's benefit but has reduced the number of persons receiving widows' pensions as there is little reason to change from the benefit to the pension.

The following table shows, for Tasmania, the number of persons receiving age, invalid and widows' pensions, and supporting parents' benefits, and the amounts paid out in pensions and allowances:

Age, Invalid and Widow Pensioners and Supporting Parents' Benefits, Tasmania						
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Age and invalid pensions—						
Number of age pensioners (a)—						
Males .....	(b) 12 792	13 122	13 363	13 408	13 484	13 463
Females .....	(b) 25 412	25 763	26 203	26 592	26 929	27 375
Persons .....	(b) 38 204	38 885	39 566	40 000	40 413	40 838
Number of invalid pensioners (a)—						
Males .....	(b) 4 162	4 365	4 397	4 456	4 592	4 747
Females .....	(b) 2 043	2 052	1 979	2 031	2 023	2 020
Persons .....	(b) 6 205	6 417	6 376	6 487	6 615	6 767
Number of wife pensioners (a)—	2 547	2 641	2 689	2 622	2 571	2 564
Amount of pensions paid ... \$'000	107 203	117 678	127 382	142 519	163 130	176 095
Widows' pensions—						
Number (a) .....	5 001	5 229	5 358	(c) 5 230	5 153	5 144
Amount paid .....	\$'000 14 660	16 621	18 844	21 003	23 160	24 187
Supporting parent's benefit—						
Number (a) .....	1 984	2 057	2 260	(c) 3 519	3 920	4 047
Amount paid .....	\$'000 6 404	7 494	8 300	13 591	20 139	22 109

(a) At 30 June.

(b) Figures affected by transfer to age pensions of residentially qualified invalid pensioners who had reached age pension age but who were not transferred in previous years.

(c) Figures affected by changes in eligibility criteria for supporting parent's benefit (see text).

*Fringe Benefits*

Pensioners and supporting parents beneficiaries, subject to an income test, can obtain a range of free pharmaceuticals; a telephone rental concession; a mail redirection concession; hearing aid services; and fare reductions on Commonwealth Government rail and shipping services.

*Family Income Supplement*

From 1 May 1983 a family income supplement (FIS) was introduced to assist low income families. It is an income-tested, non-taxable allowance of up to \$12 a week payable in respect of each child under 16 years or dependent full-time student aged 16-24 years inclusive.



The main breadwinner in the family may qualify, subject to residence requirements, for the allowance provided that:

- (i) the person or his/her spouse has a child qualified to receive family allowance;
- (ii) the person or his/her spouse is not in receipt of other forms of income support that provide for additional payments in respect of children; and
- (iii) the child does not receive or attract payment of a Commonwealth income-tested pension, benefit or allowance.

The maximum rate of allowance is \$12 a week per child and is payable if the income of the applicant (and his/her spouse) does not exceed the prescribed limit (currently \$209 per week). The total maximum rate is reduced by one half of the amount by which income exceeds this limit. The point at which entitlement to FIS ceases altogether is also the point at which entitlement to a Health Care card on the basis of low income ceases for a married couple with children.

Eligibility for FIS is established on the basis of the parental income over the four-weekly period ending on the date of the claim and is reviewed every six months.

At 30 June 1983 there were 1 076 families in Tasmania receiving payments of family income supplement in respect of 2 843 children.

**Family Income Supplement, Number of Recipients, Tasmania, June 1983**

<i>Recipients</i>	<i>Number</i>
Married couples .....	1 023
Single women .....	40
Single men .....	13
Total .....	1 076
Number of dependent children .....	2 843
Outlays (1 May - 30 June 1983) .....	\$156 000

### *Mobility Allowance*

From 1 April 1983, subject to a residence test, a mobility allowance of \$10 a week has been payable to disabled people who are employed or in vocational training for a minimum of 20 hours a week and who because of their disability are unable to use public transport without substantial assistance. The allowance may also be payable for up to three months after the requisite employment or training has ceased. This allowance is provided in recognition of the difficulties and additional costs facing disabled people who undertake employment or vocational training.

The allowance is paid free of any income test and is not subject to income tax.

At 30 June 1983, there were 3 935 people in Australia in receipt of mobility allowance. Outlays on mobility allowance between 1 April 1983 and 30 June 1983 totalled \$339 000.

### *Unemployment, Sickness and Special Benefits*

To receive unemployment benefits, a person must be out of work (but not through being a direct participant in a strike or due to industrial action by other members of a trade union of which the person is a member), must be capable of undertaking and willing to undertake suitable work and have taken reasonable steps to obtain employment. Registration with the Commonwealth Employment Service is necessary; payment is at the discretion of the Department of Social Security.

Sickness benefits may be paid to a person temporarily unable to work because of sickness or injury and who has suffered a loss of income because of this. A married woman is not eligible to receive a sickness benefit if it is reasonably possible for her husband to maintain her. Where the husband is able to maintain her partially, a benefit may be paid at a rate considered reasonable in the circumstances.

Benefits are not payable to people qualified to receive invalid, age, widows' or service pensions, supporting parents' benefits, or tuberculosis allowances. The minimum age is 16 years, the maximum 65 (male) and 60 (female). There are no nationality restrictions, but if a claimant has not been resident in Australia for one year before making the claim, the Department must be satisfied that he intends to live here permanently.

A special benefit may be granted to a person not qualified for a pension or an unemployment or sickness benefit if, because of age, physical or mental disability, domestic circumstances, or for other valid reasons, he is unable to earn a sufficient livelihood for himself and his dependants. Recipients of special benefits include, among others, persons caring for invalid parents and persons ineligible for age, invalid or widows' pensions because of lack of residence qualifications.

The next table gives Tasmanian details for unemployment, sickness and special benefits:

Unemployment, Sickness and Special Benefits, Tasmania  
Beneficiaries and Payments

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Unemployment benefits—						
Claims granted .....	no. 27 337	26 294	26 316	28 234	32 147	31 686
Persons on benefit—						
At 30 June .....	no. 9 757	10 420	11 121	12 929	16 175	20 355
Weekly average .....	no. 8 538	10 295	10 579	11 496	14 517	19 458
Benefits paid .....	\$'000 23 398	28 609	29 665	34 658	49 233	78 302
Sickness benefits—						
Claims granted .....	no. 4 284	3 881	3 559	3 626	3 707	3 750
Persons on benefit—						
At 30 June .....	no. 816	731	895	953	878	1 018
Weekly average .....	no. 887	709	746	870	914	957
Benefits paid .....	\$'000 2 385	2 024	2 299	2 901	3 595	4 618
Special benefits—						
Claims granted .....	no. 1 792	2 071	2 051	3 463	3 999	3 652
Persons on benefit—						
At 30 June .....	no. 516	556	616	808	774	804
Weekly average .....	no. 476	525	571	769	838	784
Benefits paid .....	\$'000 804	1 299	1 487	2 372	2 956	3 428
Total benefits—						
Claims granted .....	no. 33 413	32 246	31 926	35 323	39 853	39 088
Persons on benefit—						
At 30 June .....	no. 11 089	11 707	12 632	14 690	17 827	22 177
Weekly average .....	no. 9 901	11 529	11 850	13 135	16 269	21 199
Benefits paid .....	\$'000 26 587	31 933	33 451	39 931	55 784	86 348

#### *Income Taxation Applicable to Pensions and Benefits*

Income from age, wives' or widows' pensions and supporting parents', unemployment, sickness or special benefits is classified as taxable income but the amount received in a full year is usually less than the level at which income tax becomes payable. Supplementary assistance, guardians' or mothers' allowances and additional benefits for children are not taxable. If other income is earned and this raises total income above the minimum level, normal income tax provisions apply. Invalid pensions are exempt from taxation unless the invalid is of age pension age.

#### *Double Orphan's Pension*

The 1973 Budget introduced the double orphan's pension, which is payable to institutions or persons caring for a child whose parents are both dead or one parent is dead and the other parent cannot be located. At 30 June 1983 there were 122 orphans for whom pensions were being paid. Total payments in 1982-83 were \$84 000.

### *Handicapped Child's Allowance*

The handicapped child's allowance is payable to the parent or guardian of a physically or mentally handicapped child who is living in the family home and needs constant, or almost constant, care and attention. At 30 June 1983, allowances were being paid with respect to 738 severely handicapped and 158 substantially handicapped children. Payments during 1982-83 totalled \$839 000.

### *Family Allowances*

Legislation in June 1976 abolished tax rebates in respect of dependent children but this was offset by significant increases in family allowance (previously called 'child endowment') payments payable to persons (usually the mother) with dependent children. Family allowances are not subject to automatic annual indexation and have remained unchanged since 1 July 1976. One year's residence in Australia is required if the mother and child were not born here, but this requirement is waived if the Department is satisfied they intend to remain here permanently. Students aged 16 to 24 receiving payments under the Tertiary Education Assistance Scheme and certain other Commonwealth education schemes are excluded from eligibility. During 1978-79 the payment cycle was changed from four-weekly to monthly.

The following table shows family allowance statistics for Tasmania for recent years:

Family Allowances, Tasmania Dependants (Children under 16 and Students under 25 years) and Payments						
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Dependent children and students						
(a) —						
Children in endowed families .....	no. 127 806	125 359	124 203	123 117	122 893	122 604
Children in approved institutions .....	no. 292	244	209	153	125	125
Total .....	no. 128 098	125 603	124 412	123 270	123 018	122 729
Amount paid during year \$'000	30 968	(b) 28 924	30 549	27 765	39 146	39 146

(a) Number at 30 June.

(b) Payments affected by rescheduling of payments dates resulting from change from four-weekly to monthly payments.

### *Commonwealth Rehabilitation Service*

This service aims to fit disabled people for employment by supplying medical and hospital treatment, surgical aids and appliances and, where necessary, arranging special education and training courses in industry, trade, commerce, public service, etc. Although employment is specifically the responsibility of the Federal Department of Employment and Industrial Relations vocational counsellors arrange employment with suitable employers and follow up progress.

Rehabilitation training is given if the disability is a substantial handicap to engaging in full employment. Disabled people who do not qualify for free service may pay for rehabilitation themselves or may be sponsored by private or government organisations. In Tasmania, the Department's rehabilitation centre is located in Hobart at the Douglas Parker Rehabilitation Centre. There are also Regional Units of the Commonwealth Rehabilitation Service located at Launceston and Burnie where vocational counsellors, occupational therapists and social workers are available to assist the handicapped.

Amendments made to the *Social Security Act* in November 1977 enable assistance to be offered to all handicapped people, within the broad working age group, who would derive substantial benefit from the types of programs the Service offers.

The following table shows the numbers accepted for rehabilitation and placed in employment in Tasmania:

## Operation of the Rehabilitation Service, Tasmania

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Persons—						
Accepted for rehabilitation ..... no.	169	310	492	466	548	618
Placed in employment ..... no.	79	70	116	143	218	150
Expenditure (a) ..... \$'000	461	519	805	1 592	1 456	2 080

(a) Excludes capital expenditure on sites and buildings and administrative costs of the Rehabilitation Service.

*Douglas Parker Rehabilitation Centre*

The Douglas Parker Rehabilitation Centre in Hobart is a joint Commonwealth-State project designed to provide a modern rehabilitation facility for Tasmania.

A formal agreement with the Tasmanian Government on the operation of the centre was signed by the Minister for Social Security in October 1980 and the total complex was completed and fully operational in March 1982.

The centre provides treatment and training facilities for 120 adults and 80 children and accommodation for approximately 50 rehabilitees.

*Homes for the Aged or Disabled*

The *Aged or Disabled Persons Homes Act 1974* provides for building subsidies and separate land subsidies on a \$2 for \$1 basis (up to a maximum amount, which is determined from time to time). The current maximum subsidies are for a person accommodated in a self-contained unit, hostel or nursing home bed (\$15 020) and \$17 425 in the case of a double self-contained unit. A land subsidy of \$1 920 per person accommodated may be payable. These subsidies are payable to approved organisations intending to establish accommodation for aged or disabled persons. The aim is to provide accommodation in which the conditions approach normal domestic life. ('Accommodation' in this context does not refer to houses built under Federal-State Housing Agreements). Approved organisations wishing to establish day care centres may also be subsidised to a maximum of \$400 000. During 1982-83 the amount spent was \$1 975 000.

*Hostel and Personal Care Subsidy:* A subsidy is payable to eligible organisations in respect of all persons who receive approved hostel and personal care in hostel-type accommodation in an aged persons' home eligible under the *Aged or Disabled Persons Homes Act 1974*, and for whom National Health Benefit is not received. This subsidy presently stands at \$10 per week for approved hostel care for eligible residents and an extra \$40 per week for personal care service for eligible frail aged. During 1982-83, 22 organisations cared for approximately 750 qualified residents and received subsidies totalling \$920 480.

*Delivered Meals Subsidy:* A subsidy at the rate of 50 cents (plus five cents if vitamin C supplement provided) for each delivered meal is payable to approved organisations providing a 'meals-on-wheels' service. In 1982-83, 31 organisations in Tasmania provided approved meal services, and subsidy payments totalled \$165 427.

*Handicapped Persons Welfare*

The *Handicapped Persons Assistance Act 1974* provides assistance for the following prescribed services relating to handicapped or disabled persons: (i) training; (ii) activity therapy; (iii) sheltered employment; (iv) residential accommodation; (v) holiday accommodation; (vi) recreational facilities; and (vii) rehabilitation facilities.

Assistance toward approved expenditure is given to organisations under the Act by a \$4 for \$1 subsidy towards: (i) the capital cost of projects; (ii) the cost of building maintenance; (iii) the rental of premises; and (iv) the cost of equipment. In addition salary subsidies of up to 100 per cent are payable for the first two years after an organisation has commenced to provide a prescribed service and a 50 per cent subsidy is payable in

all other cases. Federal Government expenditure in Tasmania on assistance to handicapped persons under the *Handicapped Persons Assistance Act* in 1982-83 was \$1 900 000.

#### *Homeless Persons Assistance*

Assistance by way of capital grants and subsidies is made towards the operating costs of voluntary welfare organisations and local government bodies which provide accommodation, meals and welfare services to chronically homeless people. The rates paid to eligible organisations are 50 cents per meal and \$1.50 per person accommodated. In 1982-83 the total expenditure on subsidies and grants under the *Homeless Persons Assistance Act* was \$270 019.

#### *Child Care*

Organisations may receive financial assistance for a range of child care projects including full day care, occasional and emergency care. Both capital and recurrent grants are available. Expenditure in 1982-83 exceeded \$2 153 000.

#### *Emergency Relief*

Funds are provided to agencies providing emergency relief to families and individuals. Funds for 1983-84 are \$139 000.

#### *Migrant Welfare*

Social workers are available to assist people with personal problems. An ethnic liaison officer can also assist migrants and refugees with pensions and benefits matters. There are also migrant welfare officers with the Federal Department of Immigration and Ethnic Affairs and a telephone interpreter service available to assist migrants.

### **State Department for Community Welfare**

The broad objective of the Department is to enable individuals and families who require help to function in society to the best of their ability. The Department recognises the welfare of the individual as the basis of the welfare of the Tasmanian community, and ultimately the wider society of which we are a part. It is further recognised that most individuals are either members of families, or have been so for important parts of their lives. Financial hardship, societal pressures, marital conflict, disturbed children, as well as other stresses can impair the functioning of individuals, and of families. The State has a responsibility both directly and indirectly, to enhance the functioning and self-esteem of individuals, to assist in the preservation, strengthening or restoration of the family unit, and to mitigate the effects of disruptions.

The Department's services are provided through its three Regional Offices, and its three Area Offices in each Region as well as through its Family Group Homes and residential institutions. The services and expenditure of the Department are grouped under four headings: Relief, Child Welfare, Grants to Organisations and Administration and General.

Department for Community Welfare, Tasmania: Expenditure  
(S'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Administration and general .....	2 540	2 943	3 274	4 038	4 609	4 670
Relief Division .....	2 187	2 616	2 878	1 759	1 194	1 383
Child Welfare Division .....	945	1 053	1 152	1 183	1 243	1 320
Grants to organisations .....	496	630	828	1 208	1 421	1 635
Total .....	6 168	7 242	8 132	8 188	8 467	9 008

#### *Relief Division*

The functions of this Division are to investigate applications for assistance from parents with dependent children and to give food vouchers or cash relief where necessary;

to issue heating allowances (subject to an income test) to age, invalid and widow pensioners; and to help pay for funerals, transport, furniture removals, spectacles, etc. for persons in needy circumstances.

#### *Child Welfare Division*

The *Child Welfare Act* 1960, and subsequent amendments, is the statutory authority for a wide range of work. Other special aspects of the work are covered by the *Adoption of Children Act* 1968, *Domestic Assistance Service Act* 1947, as well as some Federal legislation, i.e. *Family Law Act*, *Immigration (Guardianship of Children)*. In carrying out its mandate in these areas the Department's main focus is the welfare of the family, with the interests of children being the primary concern.

At 30 June 1983, the Department employed 76 child welfare officers who provide a range of direct personal services to children and families. Voluntary supportive casework is offered to families who are experiencing difficulties and need help. Homemaker services as well as financial assistance are provided as necessary. In providing residential care for children and young people, the Department's view is that, wherever reasonably possible, this should be supplementary to the care provided by natural parents, rather than substituting for it.

For young offenders the Department considers that the best interests of both the individual and the community are most appropriately met by a positive and supportive approach designed to promote self-value and responsibility, as well as by developing opportunities for the individual to adopt a more socially acceptable way of life. Children who appear before the children's court for offences or because they are believed to be 'neglected' may be placed under the supervision of a Child Welfare Officer or made Wards of the State.

*Supervision:* At 30 June 1983, there were 187 children under the legal supervision of Child Welfare Officers:—

Southern Region	—	71
Northern Region	—	55
North-West Region	—	61

*Wards of the State:* Once a child has become a Ward of the State, the Director of Social Welfare becomes his/her legal guardian to the exclusion of all others. Through the staff of the Department, and with the help of individuals and groups in the community, the Director may exercise this responsibility for guardianship in a variety of ways.

In many cases it is considered to be in the best interests of a child to provide care by supplementing, rather than substituting for the care offered by his natural parents. Where it is necessary to remove the child from his normal home, it often remains possible to assist both the child and parents in a way which leads towards the re-establishment of a normal, healthy parent/child relationship.

The following table lists the actual location of wards as at 30 June 1983. It should be noted that all the placements listed also provide care for children who are not wards.

**Children Under Guardianship of the Community Welfare Department  
at 30 June 1983**

<i>Type of Placement</i>	<i>Number of Children</i>
Residential child care establishments	
Approved children's homes .....	61
Family group homes .....	28
Social welfare institutions .....	22
Total .....	111
Foster homes .....	238
Hospitals .....	4
Living with parent or relative .....	122
Other adult care .....	45
Living independently .....	18
Other placements .....	9
Unauthorised absences .....	4
<b>Total Wards of State .....</b>	<b>551</b>

*Adoption:* Under the *Adoption Act* 1968 the Department provides an adoption service and licenses the State's only private adoptive agency. In the year ended 30 June 1983 there were 117 adoption orders made. Of this total 55 were in respect of adoptors who were naturally related in some way to the child, and 62 were in respect of children who were not related to their adoptors.

*Early Childhood Services:* The Family and Children's Services Branch of the Department fulfils the legislative responsibilities involved in Part 6 of the *Child Welfare Act* 1960, that is the licensing and supervision of facilities where a fee is charged to provide substitute care for children younger than seven years. These responsibilities include assessment of applicants, maintenance of a support service to licensees, and the keeping of records of holders of current licences. In carrying out these duties, the over-riding aim is to encourage and develop a range of services to meet the needs of families who require substitute day care or short term overnight care for their children.

The following table shows the location and type of services for which licenses were current as at 30 June 1983:

Licensed Child Care Services, Type and Location at  
30 June 1983, Tasmania

Type of Service	South	North	N-West	Total	Comparison with 30/6/82
Family day carers—					
In schemes .....	298	191	57	546	449
Outside schemes .....	31	6	53	90	146
Play centres—					
Number of facilities .....	8	16	15	39	43
Child care places .....	128	304	256	688	764
Child care centres—					
Number of facilities .....	24	5	11	40	37
Child care places .....	584	160	300	1 044	1 023
Total .....	1 073	682	692	2 447	2 462

### Grants to Organisations

The Department has been given a limited responsibility in the area of individual welfare, e.g. the young unemployed, the handicapped and the aged. This role finds its expression in specific government endorsed programs, and the provision of grants to voluntary organisations and self-help groups. In providing grants to the non-government sector, the Department endeavours to ascertain that the aims of the applying agency are in accord with the overall objective of the Department.

The total allocations to grants programs in the year ended 30 June 1983 was as follows:

Sundry Social Services Grants	\$397 250
Women's Shelters	\$435 000
Handicapped Persons Services	\$400 000
Youth Services	\$140 500
Early Childhood Services	\$144 041
Neighbourhood Houses	\$ 89 975
Multicultural Affairs	\$ 8 570

In addition, the Department co-operated with the Federal Government in the administration of the Family Support Services Schemes and the Youth Services Schemes. As well, the Commonwealth sought the Department's advice on the distribution of its grant to emergency relief group agencies.

## REPATRIATION SERVICES AND PENSIONS

### General

The Department of Veterans' Affairs was originally established as the Repatriation Commission under Federal legislation in 1920. The Department is responsible for:

- (i) the payment of disability and service pensions to eligible veterans and their dependants;
- (ii) the provision of medical treatment to veterans for injuries and illnesses which have been determined to be related to service;
- (iii) the provision of medical treatment to widows and dependants of deceased veterans whose deaths are deemed to be service-related; and
- (iv) the provision of medical treatment for disabilities, whether service-related or not, for veterans of the Boer War, the 1914-18 War, all ex-prisoners of war and for other veterans under certain circumstances.

The Department is also responsible for functions administered by the Defence Service Homes Corporation and the Office of Australian War Graves.

Repatriation benefits are provided for men and women who served in the Australian Forces in the 1914-18 War, the 1939-45 War, the Korea-Malaya Operations, the Far East Strategic Reserve, special service in special areas overseas including Vietnam, and service with the Defence Force on or after 7 December 1972. Benefits have recently been extended to members of certain Peacekeeping Forces. Benefits may also be provided for seamen in respect of Maritime Service during the 1939-45 War under the *Seamen's War Pensions and Allowances Act*.

### Repatriation Pensions

Disability pensions are payable to veterans as compensation for incapacity accepted as service-related, and are not subject to an income test. Service pensions, in general, are payable to male veterans who have attained the age of sixty years and to female veterans who have attained the age of fifty-five years. They are subject to an income test and are broadly equivalent to age and invalid pensions.

Disability pensions may be granted to veterans whose incapacity has been accepted as related to service under the following provisions:

- (i) resulted from an occurrence on service (applies to those veterans who saw active service);
- (ii) arose out of or is attributable to service; or
- (iii) has been contributed to in any material degree, or has been aggravated by, the conditions of service.

Dependants' pensions may be granted to dependants of veterans whose death or incapacity has been accepted as service-related under these provisions.

Veterans who receive disability pensions are also eligible for free medical and hospital treatment for their service-related incapacity. With certain categories of pensioners, the eligibility for free treatment is widened to cover all disabilities. It is also possible for a veteran to qualify for free treatment for a disability without necessarily being granted a pension.

A service pension may be granted, subject to an income test in most cases, to the following:

- (i) a male veteran who served in a theatre of war, and has attained the age of sixty years or is permanently unemployable;
- (ii) a female veteran who served in a theatre of war, or served abroad, or embarked for service abroad, and has attained the age of fifty-five years or is permanently unemployable; or
- (iii) the wife of a service pensioner who is not receiving a service pension as a female veteran.



In certain circumstances, service pensions may be granted to veterans of British Commonwealth and Allied countries, and the Australian, Commonwealth and Allied mariners of the 1939-45 War. The conditions governing the income test are similar to those for age pensions described earlier in this chapter.

Details of selected Repatriation benefit rates are shown in the following table:

Repatriation Benefits, Tasmania (a) (\$ Per Week)				
Benefit	Rate			
	At 13 May 1982	At 11 Nov. 1982	At 12 May 1983	At 10 Nov. 1983
Payable Without Income Test				
Disability pensions—				
Special rate (TPI) pensions—				
Veteran .....	142.05	148.00	157.75	164.55
Wife .....	4.05	4.05	4.05	4.05
Each child .....	1.38	1.38	1.38	1.38
Intermediate rate pensions—				
Veteran .....	97.80	101.90	108.65	113.30
Wife .....	4.05	4.05	4.05	4.05
Each child .....	1.38	1.38	1.38	1.38
General rate pensions (maximum rates)—				
Veteran .....	53.55	55.80	59.50	62.05
Wife .....	4.05	4.05	4.05	4.05
Each child .....	1.38	1.38	1.38	1.38
War widows—				
Pension .....	74.15	77.25	82.35	85.90
Domestic allowance .....	12.00	12.00	12.00	12.00
Orphans' pensions—				
Father dead—				
Each child .....	15.00	16.60	16.60	18.45
Both parents dead—				
Each child .....	30.00	33.20	33.20	36.90
Payable Subject to Income Test (Maximum Rates)				
Service pensions—				
Veteran—Standard (single person) ....	74.15	77.25	82.35	85.90
Married .....	61.80	64.40	68.65	71.60
Addition for each child .....	10.00	10.00	10.00	12.00
Wife's pension (if she is not a pensioner)	61.80	64.40	68.65	71.60
Guardians' allowances—				
Where there is a child under six years or an invalid child requiring full-time care .....	8.00	8.00	8.00	8.00
Other cases .....	6.00	6.00	6.00	6.00

(a) Details relating to conditions of eligibility for the various pensions are available from the Department of Veterans' Affairs.

### Disability Pension Payments

At 30 June 1983 the proportions of veterans in Tasmania receiving disability pensions were: in respect of service in the 1914-18 War, 7.1 per cent; the 1939-45 War, 82.1 per cent; the Korea and Malaya Operations, 2.1 per cent, and other operations 8.7 per cent.

The following table shows, for Tasmania, the number of pensions in respect of veterans and their dependants, together with expenditure on disability pensions:

## Disability Pensions, Tasmania, Pensioners and Payments

Year	Number of pensions current at 30 June			Total	Expenditure during year (a) (\$'000)
	Incapacitated veterans	Dependants of—			
		Incapacitated veterans	Deceased veterans (b)		
1977-78 .....	7 734	9 169	1 941	18 844	18 676
1978-79 .....	7 521	8 678	1 928	18 127	18 696
1979-80 .....	7 349	8 400	1 753	17 502	19 389
1980-81 .....	7 137	8 072	1 735	16 944	21 918
1981-82 .....	7 040	7 890	1 751	16 681	22 965
1982-83 .....	7 062	7 836	1 907	16 805	28 887

(a) Includes widows' allowances.

(b) Includes war widows' pensions.

## Service Pension Payments

The following table shows, for Tasmania, the number of service pensions in respect of veterans and their dependants, and expenditure on pension payments:

## Service Pensions, Tasmania: Pensioners and Payments

Year	Number of pensions current at 30 June				Expenditure during year (\$'000)
	Veterans	Dependants of—		Total	
		Living pensioners	Deceased pensioners		
1977-78 .....	4 945	3 094	62	(a) 8 101	(a) 15 722
1978-79 .....	5 428	3 466	53	(a) 8 947	(a) 18 486
1979-80 .....	5 962	3 867	51	9 880	21 831
1980-81 .....	6 731	4 558	58	11 347	27 441
1981-82 .....	7 191	4 874	8	12 073	32 529
1982-83 .....	8 118	5 597	20	13 738	42 347

(a) Includes British Commonwealth pensions.

## Medical Services

To discharge these functions in Tasmania, the Department of Veterans' Affairs maintains a branch office, a general hospital and an artificial limb and appliance centre in Hobart. Facilities exist at the Repatriation General Hospital for medical treatment of hospitalised patients and specialist services for out-patients. Generally treatment for out-patients throughout the State is provided by doctors appointed by the Department as Local Medical Officers. People entitled to treatment can select a doctor from the panel of LMOs and receive treatment at departmental expense. Payment for treatment in hospitals other than the Repatriation General Hospital is met by the Department only in certain circumstances.

Free treatment is available for all veterans of the Boer War, the 1914-18 War, the 1939-45 War who receive a Disability Pension at, or above, 50 per cent of the General Rate plus a Service Pension and for all ex-prisoners of War (this includes medical, hospital, dental, ophthalmological and para-medical treatment and subject to a contribution of \$83.65 per week, treatment in nursing homes). Veterans who are suffering from malignant cancer are eligible for free medical and hospital treatment and to nursing home treatment subject to a contribution of \$83.65 per week. The only exception to this rule is that veterans who are admitted to a nursing home for treatment of a service-related disability are exempt from payment of the patient contribution.

The facilities of the Repatriation Artificial Limb and Appliance Centres are available to provide free artificial limbs to both repatriation beneficiaries and the general public.

The Vietnam Veterans' Counselling Service has been established to assist Vietnam veterans and their families with their health and social problems by direct counselling and referrals to government or other community agencies.

### **Soldiers' Children Education Scheme**

#### *Eligible Children*

Educational assistance is granted to veterans' children under the following circumstances:

- (i) if the veteran's death has been accepted as service related or if he was in receipt of a disability pension for total and permanent incapacity or for specific disabilities at the time of death;
- (ii) if the veteran, as a result of service, is blinded or totally and permanently incapacitated; or
- (iii) if the child has lost both parents, and the veteran was a member of the Forces and served in a theatre of war.

#### *Benefits*

For children under 12 years, the scheme pays the cost of school requisites, essential text books and fares. At secondary level, the weekly maximum payments for children living at home are: 12 years to 14 years \$6.75, 14 up to 16 years, \$9.35, 16 up to 18 years, or to matriculation \$20.05. At tertiary level, those living at home may receive \$40.10 per week and those living away from home, \$66.90.

## **HEALTH SERVICES**

### **Department of Health Services**

#### *Introduction*

The Department of Health Services is one of the major employing departments in the State Government with a budget each year in excess of \$100 million. Under the jurisdiction of the Minister for Health, it is administered by the Director-General of Health Services as permanent head and through him by Divisional Directors and Directors of Services. The Department is responsible for the maintenance of the health of the community, prevention of disease and the provision of government hospital and medical services. A major function is resource allocation and monitoring financial performance and activity levels of public hospitals.

Services provided directly by the Department include school dental, child health, school medical, district medical, handicap assessment, health education, the Government Analyst Laboratory and the two institutions directly administered by the Department, St John's Park Hospital for the elderly and the Mothercraft Home.

In meeting the challenges, thrown up by an expanding modern community, the Department has done pioneering work and notched up several Australian firsts. For example; Tasmania was the first Australian State to make chest X-rays compulsory and led Australia in the introduction of fluoride to drinking water. The Tasmanian School Dental Service is now unique among school dental services in Australia. The Department scored another Australian first when it established a special training school for geriatric nursing, in association with St John's Park Hospital as far back as 1964.

During 1983 the Department in co-operation with the Tasmanian Film Corporation made six films, published its own 'newspaper' and kept up a steady stream of information to the media bringing the preventive medicine message to the general public. Health education through the use of the mass media will be a continuing feature of the Department's work in 1984.

Following a review of the Department in 1983 by the Public Service Board, 1984 will be a year of readjustment and implementation of necessary changes. A start has been

made with the refinement of the Department's goals and development of objectives. These goals are: to increase the health status of the Tasmanian population; to implement the health policies of the Tasmanian Government and to plan, develop, provide and administer health services in Tasmania.

The following objectives have been set:

- the development of an appropriate balance between preventive and curative services including the allocation of adequate resources for preventive services;
- the removal of any inappropriate imbalance between the provision of inpatient services and services provided in the community;
- to ensure that the public is aware of health issues and problems through an effective health education service;
- to provide all services as efficiently and effectively as possible;
- to provide equal access to services that meet the defined needs of the communities they serve;
- to ensure that the public and private sectors are integrated and unnecessary duplication does not occur; and
- to develop improved research, planning and evaluation systems for health care services.

The Department is specifically responsible for providing:

- (i) public hospital management advisory services and the licensing of private hospitals and other medical establishments under the *Hospitals Act* 1918;
- (ii) District Medical Service;
- (iii) School Dental Service;
- (iv) Nurses' Registration Board and Dental Mechanics' Registration Board;
- (v) legislation concerned with health and allied matters;
- (vi) certain specialist medical services;
- (vii) State Drug Advisory Committee;
- (viii) liaison with the health departments of other states and the Federal Government; and
- (ix) liaison with professional, medical, dental and nursing associations.

The Director-General is the controlling authority under the Hospital Employees' Award, the Medical Officers' Award and the Nurses' (Public Hospitals) Award. The Department also controls and maintains Crown property occupied by the various sections of the Department and deals with the appointment and salaries of staff who are not officers of the Public Service.

Department of Health Services, Tasmania: Expenditure from Consolidated Revenue (\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
Administration, head office .....	1 009	854	859	975	1 046
Hospital and medical services—					
Administration .....	636	578	554	577	562
Grants to hospitals .....	61 877	66 416	75 677	84 366	91 210
Medical services, country districts .....	441	510	483	465	511
Dental Health Service .....	2 627	2 798	2 950	3 330	3 279
Nurses' Registration Board .....	22	55	74	83	93
Interim Ambulance Authority .....	1 152	1 774	1 925	2 603	2 963
Government Analyst and Chemist .....	347	382	399	468	515
St John's Park Hospital .....	6 262	6 722	7 830	8 720	10 000
Public Health—					
Administration and inspectors .....	677	684	711	843	798
School Medical Service .....	506	570	637	690	772
Child Health Service .....	667	642	782	842	1 014
Community Health Services .....	1 724	1 950	2 120	2 472	2 440
Tuberculosis and cancer registry .....	118	90	109	115	129
Miscellaneous grants and expenses .....	2 003	2 520	3 117	3 042	3 848
Total .....	80 068	86 545	98 227	109 592	119 180

### *School Dental Health Service*

This service, available free to children up to school leaving age, aims to examine and provide necessary treatment each year for every child, for whom parental consent is given.

At the end of June 1983, 41 static clinics had been established, there were 55 mobile dental units providing care in other schools and a consulting orthodontic service based in Hobart.

*Dental Therapists:* Tasmania became the first Australian state to develop a School of Dental Therapy in 1966. Students are trained (in a two year course) for service in Tasmania, on behalf of the Australian Capital Territory Health Commission and the Australian Development Assistance Bureau. Tasmanian graduates are appointed to clinics throughout the State. The School is located in Hobart and has residential hostel accommodation for up to 30 students.

### *Fluoridation*

In 1953 Beaconsfield became the first local government authority to add fluoride to its water supply and Launceston followed in 1961. In 1964 Hobart became the first Australian capital city to add fluoride to its water supply.

The Parliament passed the *Fluoridation Act* 1968, setting up a Fluoridation Committee with power to recommend to the Minister for Health the fluoridation of any public water supply and to oversee fluoridation operations.

By June 1983, fluoridation had been extended to include: the whole of the greater Hobart area served by the Derwent and Southern Regional Water Supply Schemes, extending as far afield as Sorell, Campania, Kempton, New Norfolk and Snug; the City of Launceston and surrounding areas supplied by the West Tamar and North Esk Regional Water Supplies; and numerous towns supplied by individual schemes including Burnie, Devonport, Smithton, Queenstown, Deloraine, Scottsdale, St Helens, Campbell Town, Oatlands, Strathgordon, Huonville, Ranelagh, Cygnet, Geeveston, Dover, Tullah, Zeehan, Savage River, Bridport, Somerset, Ulverstone and Wynyard.

### *District Medical Service*

In 1937 the Government undertook to help the more remote municipalities obtain medical services. Up until June 1975, participating municipalities levied a rate under the *Local Government Act* 1962, as amended, and met between one-half and one-third of the cost of the scheme. From July 1975, the Federal Government has contributed 50 per cent of the operating costs of the scheme by means of a Health Program Grant under the *Health Insurance Act*, the remaining 50 per cent being financed from State funds. The Commonwealth Government withdrew from the Scheme in September 1975.

The State Government has undertaken to continue to provide practitioners at the existing practices but the scheme is no longer free. All patients will be required to pay the scheduled fee except for pensioners and holders of Health Cards.

Established practitioners have been offered the choice of continuing in salaried practice, all revenue being returned to the Government, or taking over the practice as a private one. Replacement practitioners will only be installed on a private practice basis. In most instances, the Government will guarantee a gross level of income.

### *Community Health Services*

There are seven community health centres in Tasmania situated at Clarence, Rokeby, Bridgewater, Kings Meadows, Ravenswood, Rosebery and Queenstown. Home nursing and home care services are available in all parts of the State, generally based upon the local hospital, and currently maintain some 6 000 patients in their own homes. These services work in close conjunction with Meals on Wheels, Red Cross Transport, and the majority of volunteer organisations who are involved in such services.

### Pharmaceutical Services Section

The Pharmaceutical Services Section has numerous advisory, supervisory and regulatory functions under regulations and legislation relating to narcotics, poisons, chemicals and therapeutic goods.

### Nursing

The registration of nurses and nursing education are within the jurisdiction of the Nurses' Registration Board which also regulates the practice of registered midwives and approves courses in nursing education and hospitals and institutions as schools of nursing.

There are five schools for general nursing, four midwifery and one for child health. A three year course in Psychiatric Nursing is conducted in one hospital and a two year course in Auxiliary Nursing at two hospitals in the State. Registers are maintained for all the above categories of nursing.

Diploma of Applied Science (Nursing), Bachelor of Applied Science (Nursing Administration and Nursing Education) courses commenced at the Tasmanian College of Advanced Education, Newnham in 1982.

## Division of Public Health

### General

The Division of Public Health has responsibility for the preventive medical services of the State. The Director is responsible for the operation of the *Public Health Act* 1962 (as amended) and the control of Medical Officers of Health and other health officers employed by the Department of Health Services and municipalities throughout the State. A major responsibility is public immunisation programs, conducted through the municipalities; preparations distributed include the Sabin anti-poliomyelitis vaccine and the triple antigen vaccine (against whooping cough, tetanus and diphtheria). The Division is responsible for the Nutrition Advisory Service; industrial hygiene; environmental sanitation; pure food quality control; and the public health aspects of the building regulations. Other major functions are discussed separately in the following sections.

### Notifiable Diseases

Certain diseases are notifiable under the *Public Health Act* 1962, the aim being to prevent or check their spread. The following table shows the incidence of notifiable diseases in Tasmania for a six-year period:

Notifiable Diseases Reported to Department of Health Services, Tasmania  
(Number of Cases)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Amoebiasis .....	—	—	—	2	—	—
Brucellosis .....	—	1	—	—	—	1
Gonorrhoea .....	160	197	181	183	189	169
Hydatids .....	1	—	1	1	3	4
Infectious hepatitis .....	244	170	122	41	29	40
Leptospirosis .....	—	1	—	—	1	—
Malaria .....	1	1	1	4	1	2
Ornithosis .....	—	—	1	—	—	—
Salmonella infections .....	49	36	22	32	30	32
Serum hepatitis .....	—	—	1	5	—	—
Shigella infections .....	1	—	1	—	2	4
Syphilis .....	1	4	2	—	—	—
Tetanus .....	2	—	—	—	—	—
Tuberculosis .....	22	28	26	16	30	—
Typhoid fever (incl. paratyphoid) .....	—	—	1	—	2	—
Total .....	481	438	359	286	287	252

Special conditions apply to venereal diseases. Persons suffering from them must not marry until cured, or engage in the manufacture or distribution of foodstuffs, and are liable to arrest and detention if they fail to continue treatment until cured.

Quarantine provisions and tuberculosis are dealt with in later sections.

### *Child Health Service*

In 1982, there were 109 Child Health Centres and 12 travelling units. Triple Certificated Child Health Sisters attached to these centres advise mothers on all aspects of caring for babies and young children. They advise mothers on infant feeding, child development and other health and social problems that occur in the family. The sisters visit new born babies at home and continue the supervision either at home, or, more commonly, in the Child Health Centre where individual records are maintained. Sisters also arrange for examinations to be carried out by family doctors under the Pre-School Medical Scheme. Departmental Medical Officers carry out the examinations in Child Health Centres. Voluntary Child Health Committees working for the centres raise money for furnishing and equipping new centres which are usually built by the Department. They also meet running costs such as heating, lighting, cleaning and telephones.

*The Mothercraft Home:* This home, located in Hobart, provides training for qualified nursing sisters who want to gain child health nursing certificates and for women who want to become mothercraft nurses. It accommodates children under six years old who need care or who cannot be looked after at home, and mothers learning to look after children or having feeding problems.

### *School Health Service*

This is available free to children attending government and independent schools from kindergarten to matriculation level. Each school is visited annually by school medical officers who fully examine children at entry. Many children are also fully examined in their 11th and 15th years. In addition, children known to have defects are reviewed and special examinations are arranged for children whose physical health, behaviour or educational progress may be causing concern. Every year about 27 000 children are examined by school doctors. About 19 per cent are found to have some defect, and these are referred to family doctors, specialists and hospital clinics and other appropriate agencies for investigation.

School nursing sisters visit schools regularly to supervise the health and hygiene of pupils. They maintain medical records, perform cleanliness inspections, test sight and hearing, assist at medical examinations and follow-up cases in which defects are diagnosed. Where there has been no indication for concern about a child's health, the sister examines the child thoroughly in the 5th grade. If there is any concern the child is referred to the medical officer.

Sisters contribute to health education and research projects and may organise immunisation sessions at their schools.

### *Handicap Assessment Centres*

Assessment Centres have been established in Hobart, Launceston and Burnie. The staff comprises medical officers, nursing sisters, psychologists, occupational therapists and welfare officers. Children referred to these Centres, because of a known handicap or suspected of having a handicap, are assessed using a team approach. Specialists in other areas, e.g. education, mental health and specialist clinics in hospitals are consulted and asked to contribute to case conferences.

## State Controlled Hospitals

### *General*

In Tasmania, medical establishments include hospitals, nursing homes, geriatric establishments, convalescent homes, orthopaedic units, etc. Some are privately administered while the State Government accepts the major financial responsibility for others; in the case of the latter group, control is either direct or exercised through hospital boards.

Institutions controlled by the State include four general hospitals, 14 district hospitals, eleven hospital annexes and district nursing centres with bed accommodation and six without, one mental hospital, two maternity hospitals and three nursing homes for the aged. (The Department of Health Services directly administers one nursing home for the aged.) These institutions could all legitimately be described as 'public'. However, in the tables in this section, the term 'public' is applied only to the general and district hospitals, the other types of institutions being specified separately.

### *General Hospitals (Public)*

Hospitals providing all facilities and specialised treatment are the Royal Hobart, Launceston General, Mersey General (at Latrobe and Devonport) and North-Western General (with divisions at Burnie and Wynyard). The Queen Alexandra (Hobart), a division of the Royal Hobart Hospital, and the Queen Victoria (Launceston) are maternity hospitals.

Specialist treatment is available at general hospitals in obstetrics, gynaecology, orthopaedics, urogenital surgery, plastic and reconstructive surgery, neuro-surgery and neurology, radiology, pathology, radiotherapy, psychiatry and ophthalmology; skin diseases and venereal diseases are also treated and clinics operate in thoracic medicine and surgery. An emergency obstetric service, with specialists based in Hobart and Launceston, provides a free service to the smaller public hospitals, district nursing hospitals and district medical officers outside the two cities.

The Douglas Parker Rehabilitation Centre provides physiotherapy, occupational therapy, speech therapy and other associated rehabilitation services to day patients and in-patients who are accommodated in hostel beds. It is administered through the Royal Hobart Hospital.

The Peacock Convalescent Hospital in Hobart is run by a committee of management, most of its patients being referred from the Royal Hobart Hospital.

### *Medicare Agreement*

As of 1 February 1984 the Tasmanian Government entered into the Medicare Agreement with the Commonwealth Government, concerning the provision of joint funding of recognised public hospitals. This Agreement will continue until 1987, with provision for review in the interim period. The Medicare Agreement has replaced the Hospital Cost Sharing Agreement which was due to run until June 1985.

### *Raising of Fees*

The Medicare Agreement requires the State to provide inpatient and outpatient services at no charge to eligible persons.

Provision exists for patients to elect to be treated as a private patient within the Queen Alexandra Hospital and the Queen Victoria Hospital, this treatment to be provided by a medical practitioner of the patient's choice. An accommodation charge is levied on these patients.

Provision also exists for patients at the Royal Hobart Hospital to elect to be treated as an Intermediate Patient by their own doctor, who charges the patient on a fee for service basis. Again, the hospital charges the patient an accommodation fee. The medical practitioner pays the hospital a facility charge for use of the hospital resources.



Charges will also continue to be raised for certain other groups of patients such as those with entitlements under the *Workers' Compensation Act* and the *Motor Accidents (Compensation and Liability) Act*.

### *Computerised Information Systems*

With the increased complexity and costs of running hospitals, and associated need for up to date information, the Department has been examining and implementing computer based information systems. All payrolls are now processed on the resources of Health Computing Services of Victoria as part of a complete personnel payroll reporting system. A personnel budget establishment system was implemented from 1 July 1983 and formed the basis for the allocation of funds for salary and wages. A state-wide computer network to provide for Medicare data collection (on behalf of the Commonwealth), patient billing, admission transfer, separation system and patient master index will be operational during 1984.

### *State Controlled Hospitals: Finances and Patients*

The following tables give summaries of the financial operations and patient numbers of State controlled hospitals and hospitals for the aged:

**State Controlled Hospitals and Hospitals for the Aged, Tasmania**  
**Receipts and Payments (a), 1982-83**  
**(\$'000)**

<i>Particulars</i>	<i>Hospitals (excluding mental)</i>			<i>Hospitals for the aged</i>	
	<i>Public (b)</i>	<i>Maternity (c)</i>	<i>Total</i>	<i>Mental hospitals (d)</i>	
<b>Receipts—</b>					
Government aid—					
State .....	43 254	1 358	44 612	13 001	4 500
Federal .....	43 202	1 357	44 559	129	4 499
In-patient fees .....	22 174	2 014	24 188	2 312	2 672
Out-patient fees .....	4 211	20	4 231	—	—
Other .....	9 647	1 265	10 912	201	6 685
<b>Total .....</b>	<b>122 488</b>	<b>6 014</b>	<b>128 502</b>	<b>15 643</b>	<b>18 356</b>
<b>Payments—</b>					
Salaries and wages .....	87 370	3 946	91 316	12 079	13 777
Provisions .....	2 394	137	2 531	(e)	1 445
Domestic supplies .....	2 770	113	2 883	(e)	345
Dispensary, etc. ....	8 138	196	8 334	(e)	186
Other .....	22 561	1 736	24 297	3 564	2 711
<b>Total .....</b>	<b>123 233</b>	<b>6 128</b>	<b>129 361</b>	<b>15 643</b>	<b>18 464</b>

(a) Excludes expenditure from State Loan Fund.

(b) Includes general and district hospitals; includes maternity wards in public hospitals.

(c) Excludes maternity wards in public hospitals.

(d) Refers to Royal Derwent Hospital incorporating Millbrook Rise.

(e) Not available on a comparable basis; included in 'Other'.

**State Controlled Hospitals and Hospitals for the Aged, Tasmania  
Accommodation and In-Patients**

Particulars	Hospitals (excluding mental)		Mental Hospitals		Hospitals for the aged	
	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83
Hospitals and homes .....	no. 21	21	1	1	4	5
Bed days .....	no. 495 597	497 724	251 350	247 029	250 300	245 368
Beds available .....	no. 2 062	2 046	880	880	825	826
In-patients—						
Total number treated .....	55 938	56 637	1 184	1 209	1 790	1 603
Daily average number of patients during year .....	1 358	1 364	689	677	686	672
In-patient costs—						
Total .....	\$'000 73 403	80 781	14 782	15 643	15 890	17 215
Daily average per patient .....	\$ 148.11	162.30	58.81	63.33	63.56	70.16

*Hospitals for the Aged and Invalid*

**Government Hospitals for the Aged, Tasmania, 1982-83**

Hospital	Other Accommodation	Beds Available	Approved Nursing Home Beds			Daily Average	Percent Occupancy
			Bed Days				
			Ordinary with Ext Care Benefit	Ordinary	Total		
Cosgrove Park (a)	136	144	23 315	25 659	48 974	134.18	93.18
St John's Park .....	20	541	69 370	77 224	146 594	401.63	74.24
Spencer Nursing Home (b) .....	—	66	17 556	5 729	23 285	63.80	96.67
Mersey Nursing Home .....	—	67	21 822	1 997	23 819	65.26	97.40
Webster Nursing Home .....	—	8	766	1 930	2 696	7.39	92.33
Total .....	156	826	132 829	112 539	245 368	672.24	81.39

(a) Cosgrove Park is administered as part of the Launceston General Hospital.

(b) This is a geriatric wing of the Wynyard Division of the North West General Hospital.

*District Hospitals (Public)*

These do not provide the diverse range of services available in the general hospitals, and do not have resident medical officers. They are located at Beaconsfield, Campbell Town, Currie, Franklin, Longford, New Norfolk, Ouse, Queenstown, Rosebery, St Helens, St Marys, Scottsdale, Smithton and Ulverstone.

**Private Medical Establishments**

There are 98 private medical establishments in Tasmania operated by charitable and church organisations and by private individuals or organisations. Most are concerned with care of the aged but five are hospitals with a more general purpose and one is a psychiatric hospital. Also, seven are used for the accommodation of physically and mentally handicapped persons. All 90 are registered under Part III of the *State Hospitals Act* but six are also registered under the Federal *National Health Act* and *Health Insurance Act* as hospitals. These are Calvary, St Johns, St Helen's and Hobart Clinic in Hobart, and St Lukes and St Vincent's in Launceston; all provide medical and surgical services except Hobart Clinic. Forty-three of the remaining establishments are licensed to provide nursing home care and 27 to provide accommodation for ambulant patients only.

The largest units in the non-hospital group are: Hobart area, A.A. Lord Homes (111 beds), St Ann's Rest Home (126), Freemasons Home (126), Lillian Martin Home (126), Mary's Grange (91), Strathaven Lodge (117), Queen Victoria Home for the Aged (87); Launceston area, Nazareth House (103), Ainslie House (58); North-Western area, Meercroft Home for the Aged (96), Eliza Purton Home for the Aged (91).

### **Government Analyst's Laboratory**

This laboratory analyses a wide variety of foods, drugs and other substances and undertakes work for Government departments and the public. Its work includes food and agricultural chemistry, forensic chemistry and toxicology, analysis for industrial hygiene purposes, water and corrosion problems, and other matters such as blood alcohol examinations for *Road Safety (Alcohol and Drugs) Act* purposes.

### **Other Health Matters**

#### *Child Health Institutions*

These are medical institutions run by the State or subsidised by public funds. They provide treatment and supervision along with general education. The Sight Saving School, School for the Blind and Deaf, Talire (for retarded children) and Wingfield (for orthopaedic patients) are government institutions for children with particular defects.

#### *Ambulance Services*

Since January 1983 ambulance services have been provided on a unified basis throughout Tasmania under the direction of a Director of Ambulance Services, who is subject to ministerial control. Ambulance services are organised on a regional basis within the southern, northern, and north-western regions of the State, each headed by a Regional Superintendent. Each region has an Ambulance Advisory Council established under the *Ambulance Service Act 1982*, and there is also a single statewide Tasmanian Ambulance Service Advisory Council. The funding basis of the ambulance service has altered, with the municipal contribution and the State Government contribution towards the budgeted operating costs of the Ambulance Service being shared equally at 40 per cent of the total cost, with the remaining 20 per cent of funds being generated from fees raised against hospitals for inter-hospital transfers of patients, against the Motor Accidents Insurance Board, and against Workers' Compensation Insurers.

#### *Royal Flying Doctor Service*

This was established in Tasmania in 1960 and has as its purpose the provision of medical and dental services to persons in isolated areas. If the illness or injury is serious, a doctor flies to the patient and if necessary brings him back to hospital. The ambulance services receive the calls, make arrangements to charter aircraft and supply medical equipment. The Federal and State Governments make an annual grant towards operational expenses.

#### *Blood Transfusion Service*

The Australian Red Cross Society operates the blood transfusion service with a joint grant from the State and Federal Governments. The combined grant in 1982-83 was \$486 695.

#### *Alcohol and Drug Dependency Board*

This Board was established under the *Alcohol and Drug Dependency Act 1969*; its members are appointed by the Minister for Health from the medical, pharmaceutical, social service, police and legal professions. Its functions are: (i) to keep under review all matters relating to the prevention and treatment of alcohol and drug dependency; (ii) to advise on the declaration and control of substances as drugs under the Act; and (iii) to act as a board of appeal for applications by patients for discharge from treatment centres.

The treatment and rehabilitation of sufferers of alcohol and drug dependency are handled by the Mental Health Services Commission, the Commission's acute psychiatric

units (at Wynyard, Devonport and Launceston), the Royal Derwent Hospital at New Norfolk, the Royal Hobart Hospital and the John Edis Hospital at New Town have been declared treatment centres.

### *Municipal Health Functions*

Municipal councils and city corporations possess wide powers and responsibilities in public health. They organise triple antigen immunisation campaigns against diphtheria, whooping cough and tetanus, and vaccinations against poliomyelitis, smallpox, rubella and measles. (These are available without charge to children under 17 years.) They control the condemnation of sub-standard dwellings, the disposal of sewage, the provision of garbage and night soil services and the reticulation of water. A medical officer of health, often appointed by two councils, is responsible, among other things, for: inquiring into the causes, origins and distribution of diseases; investigating influences affecting the public health of the district; directing and supervising the municipal health inspectors in the execution of the *Public Health Act*; inspection of local certificates of notification of infectious disease and direction of control of such disease; reporting the existence of any nuisance; inspection of any animal carcass for sale for human consumption; and inspecting any premises where milk or milk products are produced or stored.

## **Mental Health Services Commission**

### *Introduction*

Significant advances have been made in the field of clinical psychiatry and in the treatment of mental illness during the past three decades. The development of psychotropic drugs, new therapeutic techniques and improved methods of clinical practice have revolutionised the mental hospital from an institution for the incarceration of lunatics to a modern hospital geared to the care and rehabilitation of the sufferers of psychiatric disorders.

### *Administration*

The Mental Health Services Commission was established under the *Mental Health Services Act* 1967, following an interdepartmental investigation into psychiatric services in Tasmania. The Commission comprises three members: a Medical Commissioner, a Clinical Commissioner and an Administrative Commissioner. Since 1 July 1968, the Commission has operated as a statutory authority, completely separate from the Department of Health Services.

The Mental Health Services Commission provides integrated community services and to this end has established acute psychiatric units at Launceston, Wynyard and Latrobe. These regional units are closely linked to the public hospital complexes.

In September 1972, the Commission took over the Tasmanian Chest Hospital at Creek Road, Hobart and re-named the institution the John Edis Hospital. The facilities at this hospital have enabled the services for alcoholism and psychiatric disorders, formerly carried out at Clare House, New Town, to be expanded.

The principal institution under the control of the Commission is the Royal Derwent Hospital.

### *Royal Derwent Hospital*

The Royal Derwent Hospital (at New Norfolk) is the State's principal centre for the treatment of psychiatric disorders and for caring for the intellectually handicapped. The hospital is divided into sections and patients are allocated to the sections on the basis of their medical diagnosis. The basic division of patients is into those who are psychiatric patients and those who are intellectually handicapped.

### *Other Institutions*

'Melrose' is the headquarters of the Commission and provides administrative and personnel and financial services to the various clinics and centres under its control, and

liaison with the Government. The Director of Intellectual Handicap Services is also located at Commission headquarters.

*Child and Adolescent Psychiatric Unit (New Town)* is a centre for children and adolescents with disturbances of behaviour and/or emotions where help is offered to the children and adolescents, their parents and families. The centre also functions in a consultative capacity to allied professionals and organisations and fulfils a teaching role to both professionals and the community.

*Community Services South* provide a specialist referral system for general practitioners and other health workers in the care of those with mental illness or emotional and behavioural problems. Clients are dealt with on a community or out-patient basis, with referrals to hospital when necessary. Psychiatric assessment, medical treatment, counselling and psychotherapy, using a team approach, are available. A further aim of the service is to promote mental health through community education and liaison with other agencies.

*Professional Psychiatric Unit (Royal Hobart Hospital)* provides psychiatric assessment and treatment of a spectrum of ambulatory patients not requiring security facilities. A comprehensive range of treatment is available. There is co-operation with other clinics and agencies, and, as an academic unit, it reaches post-graduate and under-graduate medical staff.

*Lindsay Miller Clinic* is a general hospital psychiatric unit at Launceston General Hospital, providing comprehensive services to adults as out-patients, day-patients and in-patients. There are 16 acute beds and 12 hostel beds. A wide range of medical psychotherapeutic and social case-work methods of management are provided, with a psychiatric consultant service. Liaison and educational contacts are maintained with other community services.

*LANTADD (Launceston and Northern Tasmanian Alcohol and Drug Dependency Service)* provides medical assessment and treatment, combined with individual counselling and group work to deal with alcohol and drug dependency problems and associated problems of living. Beds are provided at the Lindsay Miller Clinic for medical treatment of short duration, while detoxification is managed at the Launceston General Hospital.

*Elonera Handicapped Children's Centre* is a day centre providing stimulation and individual training programs for the mildly to profoundly intellectually handicapped. Parent support, early intervention and home based programs are offered. Children who are capable, are transferred through child guidance to kindergarten and/or special school.

*North East Community Team* provides assessment and counselling for people with emotional problems, with emphasis on early intervention. This is done through individual casework, group work or community organisation. Clients are dealt with on a community basis with referral to hospital when necessary. A further aim of the service is to promote mental health services through community education and liaison with other agencies.

*John Edis Hospital (New Town)*. This 40 bed hospital provides in-patient, day-patient and out-patient treatment for persons with alcohol/drug dependency through education programs, individual and group counselling and occupational therapy.

*Quindalup Training Centre (New Town)*. In December 1981 the Commission took over respite care services previously operated by a voluntary organisation. Overnight care is provided to intellectually handicapped children up to 16 years of age for whom there is no alternative community based respite service. The Centre also operates a limited day care service.

*Forensic Service* is concerned principally with persons referred by the Courts, Probation and Parole Services, or by the Prison authorities. A full psychiatric/psychological service is offered.

*Rocherlea Activity Training Centre*. The Commission operates a respite care service at this Centre. The service is limited to the provision of respite care to intellectually handicapped persons of all ages and levels of disability.

*Wellington Street Clinic* offers help to children and adolescents with emotional and/or behavioural problems. Psychotherapy in a family context is used though other forms of treatment are available. Community work includes education, initiation of services and agency co-ordination.

*Spencer Psychiatric Clinic (North-Western General Hospital)* is a general hospital psychiatric unit with 17 in-patient beds and out-patient facilities. The unit is recognised as an Alcohol and Drug Dependency Treatment Centre and also provides psychiatric treatment for the whole range of psychiatric disorders.

*Community Services North West (Devon Clinic and Devonport Psychiatric Clinic)* This service provides a special referral system for general practitioners and other health workers in care of those with mental illness or emotional and behavioural problems. Clients are dealt with on a community or out-patient basis, with referral to hospital when necessary. Psychiatric assessment, medical treatment, counselling and psychotherapy, using a team approach, are available. A further aim of the service is to promote mental health through community education and liaison with other agencies. The facility also provides day centre care for patients selected by the psychiatric team.

Summary of Patient/Client Statistics, 1982-83

Programs and program components	In-patients				Out-patients/day-patients	
	Admissions		Discharges		Individual out-patients	Individual day patients
	Individual patients	Total admissions	Total	Average stay (days)		
<b>Psychiatric and Public Hospitals—</b>						
Royal Derwent Hospital .....	347	461	444	48.2	..	14
Royal Hobart Hospital .....	291	342	336	19.5	778	32
Launceston General Hospital .....	302	423	427	13.5	799	34
North-Western General Hospital .....	255	392	389	11.9	449	9
Mersey General Hospital .....	222	296	296	22.1	98	16
Total .....	1 417	1 914	1 892	..	2 124	105
<b>Child and Adolescent Psychiatric Services—</b>						
South .....	..	..	..	..	830	—
North .....	..	..	..	..	255	2
Total .....	..	..	..	..	1 085	2
<b>Intellectual Handicap Services—</b>						
Royal Derwent Hospital .....	36	58	89	..	..	4
<b>Alcohol and Drug Dependency Services—</b>						
John Edis Hospital .....	383	503	498	10.8	..	..
Community services (South) .....	..	..	..	..	563	106
Community services (North) .....	..	..	..	..	199	—
Total .....	383	503	498	10.8	762	106
<b>Forensic .....</b>						
Forensic .....	..	..	..	..	127	—
<b>Community Psychiatric Services—</b>						
South .....	..	..	..	..	823	88
North .....	..	..	..	..	314	—
North-West .....	..	..	..	..	812	43
Derwent Valley .....	..	..	..	..	181	—
Total .....	..	..	..	..	2 130	131
Total .....	1 732	2 475	2 479	..	6 228	348

continued next page

Summary of Patient/Client Statistics, 1982-83—continued

Intellectual Handicap Services	Respite care		Day training		Average contacts
	Individual clients	Total admissions	Individual clients	Total contacts	
Quindalup .....	54	358	41	2 415	58.9
Elonera .....	..	..	33	2 394	72.5
Rocherlea .....	70	212	57	7 978	139.9
Total .....	124	570	131	12 787	97.6

### Commonwealth Department of Health

#### General

The Department is concerned in Tasmania with the administration of the *Quarantine Act* 1908, the *National Health Act* 1953, the *Health Insurance Act* 1973 and the *Nursing Homes Assistance Act* 1974 and the control and maintenance of Pathology and National Acoustic Laboratories at Hobart and Launceston.

#### Quarantine

Quarantine guards against the importation from overseas of human, animal and plant infection. By arrangement, plant and animal quarantine is operated by the State Department of Agriculture. In general, *interstate movements* of animals and plants are left to the states, unless Commonwealth action is necessary for the protection of a state.

#### Health Program Grants

These grants, under the *Health Insurance Act*, are generally paid to organisations providing services through medical and para-medical personnel remunerated on a salaried or sessional basis. An approved organisation is entitled to be paid an amount equal to the cost incurred by the organisation in providing the approved health service, including such part of the management expenses of the organisation as the Minister considers attributable to the provision of the health service.

#### Domiciliary Nursing Care Benefit

This benefit of \$42.00 per fortnight is designed to help meet the cost of home nursing and other professional care for people who are chronically ill but being cared for in their homes. It is payable to any person who provides continuous care for a patient in a private home provided the home is the usual residence of both the person and the patient and provided the patient meets certain medical criteria. The main eligibility rules are:

- (i) patients must be 16 years of age or more;
- (ii) patients must have an official certificate from their doctor stating that because of infirmity or illness, disease, incapacity or disability they have a continuing need for nursing care as would qualify him/her for admission to a nursing home and that such an admission would be necessary if it were not for the home care provided; and
- (iii) patients must be receiving care by a registered nurse on an approved basis.

#### Nursing Home Benefits

The *Nursing Homes Assistance Act* came into effect from 1 January 1975. Under this Act, religious and charitable nursing homes can elect to come under the provisions of that legislation which relate to 'deficit financing' of such nursing homes. These nursing homes submit a budget showing estimated operating receipts and payments and the estimated end of year deficit. The Commonwealth Government provides monthly advances against the anticipated deficit and a final settlement based on the actual deficit revealed

in the audited end of year accounts. The Act prescribes a fee to be charged to patients (\$83.65 per week with effect from 3 November 1983) and this may be varied by legislation. Arrangements exist for waiver or part-waiver of the prescribed fee in certain circumstances.

Those religious and charitable nursing homes which have not elected to come under provisions of the *Nursing Homes Assistance Act*, together with private gain nursing homes and government nursing homes, continue under the provisions of the *National Health Act*.

The benefits and patient contribution to fees in these nursing homes are given in the following table:

**Nursing Home Benefit Rates (National Health Act), Tasmania**  
(\$ Per Week)

<i>Particulars</i>	<i>Ordinary care patients</i>	<i>Intensive care patients</i>
Basic benefit from 3 November 1983 (a) .....	189.00	231.00
Patient's share of fees from 3 November 1983 .....	83.65	83.65
Total fee (b) .....	272.65	314.65

(a) Payable by Commonwealth Government irrespective of whether the patient has private health insurance or not from 1 September 1981.

(b) 'Total fees' are the standard fees as determined by the Government at 3 November 1983. If fees actually charged are: (i) less than the standard fee, the basic benefit, shown above, is reduced by the difference; or (ii) greater than the standard fee, the patient's share, shown above, is increased by the difference.

Private gain nursing homes and those religious and charitable nursing homes, which have not elected to come under the provisions of the *Nursing Homes Assistance Act*, accept a fee control system and require departmental approval to vary their prescribed fees. The prescribed fees may differ between nursing homes because of the 'base' figure accepted for each nursing home when fees control was introduced on 1 January 1973 and because of continuing different costs between such homes. An independent fees review committee exists in each state to determine any appeals made by nursing homes against departmental decisions on fees.

#### *Pharmaceutical Benefits*

The Pharmaceutical Benefits Scheme, under the provisions of the *National Health Act*, provides a comprehensive range of drugs and medicinal preparations which may be prescribed by registered medical practitioners for persons receiving medical treatment in Australia. Under this scheme, basic rate pensioners receive their pharmaceutical requirements free of charge; non-pensioner patients are required to pay a patient contribution fee of \$4.00 (reviewable) for each benefit item received. Concessional beneficiaries are required to pay a patient contribution fee of \$2.00 (reviewable) for each benefit item received. National Health prescriptions are valid for six months from the date they are written.

#### *Pathology Laboratories*

These laboratories, situated in Hobart and Launceston, provide diagnostic services for medical practitioners and hospitals. A general clinical pathology service is offered, and the laboratories also perform serological services for the Red Cross Blood Transfusion Centre.

#### *National Acoustic Laboratory*

The National Acoustic Laboratories (NAL) provide audiological services through Hearing Centres located in Hobart and Launceston and by regular visits to larger country centres.

Hearing Centre services fall into two broad categories; audiological assessment and audiological rehabilitation. The former involves evaluation and definition of an indivi-



dual's auditory function through the fitting of an appropriate hearing aid, supplemented by additional rehabilitative measures. The service is planned to allow adequate follow-up of persons provided with hearing aids, including periodic review and replacement of aids, as hearing needs change or new technology becomes available.

Two main types of 'Calaid' hearing aids are provided by the Laboratory: behind-the-ear and body aids. Each type is made in a number of ranges of power to suit differing degrees of deafness, and each has been designed to allow ready acoustic and electronic modification of performance characteristics. This enables selective fitting for virtually every type of hearing loss, using a selection procedure developed by the Laboratory. In addition to Calaid's, a limited number of imported aids are utilised in those cases where the particular acoustic qualities of such aids are required. Supplementary wireless aids are supplied to hearing impaired children who have special educational requirements.

NAL services, which are free to eligible persons, include supply and maintenance of hearing aids as well as provision of batteries. At present, those eligible for full services include children (up to 21 years), Social Security beneficiaries (and dependants) who have appropriate entitlements, Veterans' Affairs' beneficiaries (and dependants), Armed Forces personnel and Commonwealth Compensation beneficiaries. Referral, except in the case of children, has to be by an appropriate Medical Practitioner.

#### *Isolated Patients Travel and Accommodation Assistance Scheme*

This scheme, which was introduced on 1 October 1978, operates under the *National Health Act* and in general provides financial assistance to patients, and escorts or attendants where necessary, who need to travel more than 200 kilometres from their home to obtain specialist medical treatment or services. Benefits include the refund of travel costs less \$20.00 per claim and an accommodation allowance of up to a maximum of \$20.00 a night per person for overnight stays due to transport limitations and/or medical considerations.

## HEALTH INSURANCE

Between 1 September 1981 and 31 January 1984 the health insurance arrangements operated as follows:

All patients other than Pensioner Health Benefit Card-holders, Health Benefit Card-holders (Sickness Beneficiaries) and Health Care Card-holders (for people in special need) were required to meet any medical and/or hospital costs incurred. This could be done either by taking out insurance with a registered health benefit organisation or from their own pockets. A taxation rebate was introduced for contributions paid to a registered health benefits organisation to the extent of contributions paid for cover at the basic medical and/or hospital table levels. This rebate ceased on 30 June 1983.

#### *Medical Benefits*

Registered health benefit organisations offered a basic medical benefits table which provided coverage for 85 per cent of the schedule fee with a maximum payment by the patient of \$10.00 for any one service where the doctor charged the schedule fee. Organisations also offer supplementary and ancillary benefits. Commonwealth medical benefit at the rate of 30 per cent of the schedule fee for each service listed in the medical benefits schedule is paid by the registered benefit organisation and forms part of the benefit received towards the cost of medical services.

#### *Hospital Benefits*

Registered health benefit organisations also provided a basic hospital benefits table covering accommodation in shared rooms of public hospitals with doctor of choice (which was available at Royal Hobart Hospital and both Queen Alexandra and Queen Victoria Maternity Hospitals) or with doctors engaged by the Hospital. In this latter case the professional service fee of \$60.00 per day was also covered by the basic table. All public hospitals raise accounts for out-patient services and these fees are also covered. The

organisations also offered supplementary benefits which provided additional benefit for private hospital accommodation.

*Pensioner Health Benefit Card-holders*  
*Health Benefit Card-holders*  
*Health Care Card-holders*

Persons who held one of the above-named cards which were issued by the Department of Social Security did not have to pay for public hospital accommodation nor treatment for medical services where their doctor bulk-billed. If their doctor did not bulk-bill the person could register with one of the registered health benefit organisations (free) and the accounts then attracted a Commonwealth Benefit of 85 per cent of the schedule fee with a maximum payment by the patient of \$5.00 for any one service where the schedule fee had been charged.

Those covered were:

- (i) pensioners and sickness beneficiaries with Pensioner Health Benefit cards (and their dependants);
- (ii) migrants and refugees who had been authorised by means of an entry permit in their travel document to remain indefinitely in Australia (and their dependants), during their first six months here;
- (iii) people receiving unemployment or special benefits who met the Pensioner Health Benefits income test (and their dependants); and
- (iv) people on specified low incomes, for example:
  - married couples with an income of less than \$199.00 a week, plus \$24.00 for each child;
  - single parents with one child with an income of less than \$223.00 a week, plus \$24.00 for each additional child;
  - single people with an income of less than \$119.00 a week.

*Other Services*

The arrangements outlined above for medical benefits also applied to consultations with optometrists, certain specialised oral surgery carried out in hospital operating theatres and to orthodontic and related treatment for young people suffering from cleft lip and palate conditions where such services were covered by the Government medical benefit schedules.

*Long Stay Hospital Patients*

To be classified as a 'nursing-home type patient' patients must have been hospitalised for a continuous period exceeding 60 days unless a medical practitioner certifies that the patient is, and would continue to be for a specified period, in need of acute care, professional attention for an acute phase of the patient's condition, active rehabilitation or continued management, for medical reasons, as an in-patient. 'Nursing-home type patients' were required to make a specified 'patient contribution' towards the cost of their hospitalisation and were not able to cover that contribution through insurance.

**Medicare**

On 1 February 1984 Medicare came into operation. This scheme covers all Australians and provides the following benefits:

*Medical Services:* for these services Medicare pays a benefit of 85 per cent of the schedule fee with a maximum contribution of \$10 per service. If the doctor chooses to direct bill Medicare the patient will not be required to meet any cost. In those cases where the 85 per cent rebate from Medicare is sought no private insurance will be available to meet that 15 per cent gap.

*Hospital Benefits:* standard ward accommodation and treatment by hospital doctors is provided at no charge in the public hospitals system. Out-patients services at public hospitals are also provided at no charge.

The arrangements outlined above for medical benefits also apply to consultations with optometrists, certain specialised oral surgery carried out in hospital operating theatres and to orthodontic and related treatment for young people suffering from cleft lip and palate conditions where such services are covered by the medical benefit schedules.

The Medicare system is financed by a 1 per cent levy on all Australian residents whose income exceeds the following levels:

- (i) single people earning above \$6 698 per annum; or
- (ii) married couples and sole parents with one child with incomes above \$11 141 per annum. The exemption level increases by \$111 per year for each dependant child.

The maximum levy payable has been set at \$700 per year.

Exemptions from the levy are provided for; blind pensioners, certain pensioners eligible for treatment from the Department of Veterans' Affairs, and migrants and refugees for the first six months of residence.

#### *Long Stay Hospital Patients*

These arrangements continue unchanged except that the classification from 1 February 1984 takes effect after 35 days hospitalisation.

#### *Private Insurance*

Private insurance is available for those people wanting a choice of doctor in the public hospital system, assistance to meet accounts for accommodation in private hospitals and to cover ancillary services, such as physiotherapy, dental and optometrical appliances.

Registered health benefit organisations offer a basic private hospital table to cover the \$80 per day charged to those persons being treated by their choice of doctor in a public hospital. The table also pays \$80, \$100 or \$120 per day to help meet charges for accommodation in private hospitals. The organisations also offer supplementary hospital benefits which provide additional cover for private hospital accommodation, and accommodation in a private room of a public hospital.

Medical ancillary benefits continue to be offered by organisations. These benefits cover such areas as physiotherapy, chiropractic and dental treatment, optometrical and dental appliances and prostheses.

#### **Further References**

##### *ABS Publications*

Year Book Australia (1301.0), annual.

##### *Other Publications*

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## CHAPTER 9

### LAW, ORDER AND PUBLIC SAFETY

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## Chapter 9

### LAW, ORDER AND PUBLIC SAFETY

#### LAW IN TASMANIA

Following British colonisation of Van Diemen's Land from 1803, a system of law and courts based on the Imperial system was established in the colony. A description of the origin and evolution of Tasmanian law is included in the 1976 and earlier editions of the *Year Book*. This section describes the present system of law operating in the State.

#### The Criminal Law of Tasmania

In 1924 the *Criminal Code Act*, which codified and brought together the criminal law of Tasmania, was passed. This Act embodied the State's criminal law in the form of a code which was made a schedule to the 1924 legislation.

The *Parole Order Transfer Act* 1983 will, when proclaimed to commence, allow for the reciprocal enforcement and discharge of parole orders on parolees in Tasmania and elsewhere in Australia.

An amendment made to the Criminal Code in 1983 has revised Chapter 11 of the Code which deals with escapes from lawful custody and the harbouring, maintenance and employment of those who escape from custody.

#### Juries

Tasmanian legislation regulating juries seems to have been first passed in 1830 although, for many years before that date, the introduction of the British system of trial by jury in civil and criminal cases had been persistently urged in the colony. The *Hobart Town Gazette* shows that juries had been employed in the colony for the trial of criminal cases from the establishment of the Supreme Court in 1824. Juries remain as the tribunal for trying indictable criminal cases and there is limited right to a jury in civil actions, although in 1935 they were abolished for the purpose of trying motor accident cases.

Although the Tasmanian jury system was based on the English system it has, since 1934, embodied the principle of allowing *majority* decisions in certain circumstances instead of requiring the *unanimous* decisions once characteristic of jury usage in England and most other countries.

Civil cases have a seven-member jury and, if after three hours deliberation a seven-nil decision cannot be reached, a five-two decision is accepted. If the minimum five-two decision cannot be reached after four hours, the jury may be discharged.

In criminal cases, similar principles apply except that a 10-2 decision is accepted in lieu of 12-nil after stipulated periods of deliberation. In the case of murder, 12-nil is necessary to convict, but 10-2 can bring in a verdict of not guilty, or not guilty of murder but guilty of a lesser crime.

#### The Present Law Court System

##### *Courts of Petty Sessions*

For particular municipalities in the State, there is a Court of Petty Sessions. The Court is constituted by a magistrate (who must have been a legal practitioner or barrister for not less than five years) or by two or more lay justices. In major centres of population,

a Court sits regularly and, in smaller centres, a Court sits less frequently or is convened as occasion requires.

A Court of Petty Sessions has jurisdiction over all summary offences and also over certain indictable offences at the option of the defendant. Under the *Justices Act 1959*, a defendant may choose summary trial in the Court of Petty Sessions when charged with the following crimes: (i) Escape or rescue; facilitating escape of a prisoner or harbouring an offender; assisting escape of a criminal lunatic; rescuing goods legally seized; making a false declaration (or statement). (ii) Stealing; killing an animal with intent to steal; unlawfully branding an animal; obtaining goods by false pretence; cheating; fraud in respect of payment for work; receiving stolen property. (In all these cases the value of the property concerned must exceed \$500 but not \$5 000. If the value does not exceed \$500 the defendant will be tried summarily. If it exceeds \$5 000 he will be committed for trial in the Supreme Court.) (iii) Breaking a building other than a dwelling-house. (It is necessary for the defendant to be committed to the Supreme Court for trial where it is alleged that in the commission of the offence: property to the value of more than \$5 000 has been stolen; violence has been used or offered to any person in or about the building; the person had in his possession a gun, pistol, dagger, cosh, or other offensive weapon; explosives were used; or the defendant intended to commit a crime other than stealing.) (iv) Forgery; uttering. (The complaint must be for an offence in respect of a cheque for not more than \$5 000.)

#### *Courts of Request*

These are constituted as courts with civil jurisdiction for particular municipalities in accordance with the authority given by the *Local Courts Act 1896*. Courts are held before a commissioner who is usually a magistrate. The Attorney-General fixes the dates on which these courts sit. Every Court has jurisdiction throughout the State but a plaintiff may have his action struck out if he brings it in a Court other than the Court having jurisdiction, i.e. the Court nearest to which the cause of action arose. In such circumstances the plaintiff may lose costs.

The current jurisdiction of a Court of Requests, which is a court of record, covers all personal actions where the debt or damage claimed does not exceed the maximum amount fixed under the Act. Since 1 November 1966, the sum of \$1 500 has been fixed as the maximum jurisdiction for a Court of Requests in respect of a debt or liquidated sum, and \$1 000 in any other case. Legislation amending the *Local Courts Act 1896* was passed in 1983 which will, from a date to be proclaimed, increase the jurisdiction of the Court of Requests to \$5 000, and abolish the distinction between liquidated and unliquidated claims in so far as that distinction affected the institution of actions.

The Commissioner alone determines all questions of fact as well as of law and his decision is the judgment of the Court, unless a jury is required. In any action either party may require a jury as of right and there is power for the Commissioner to order that an action be tried by a jury, even though neither party has required it. Law and equity are administered concurrently in the Court and the general principles or practice in the Supreme Court are adopted and applied in cases not expressly provided for in the Act or Rules.

#### *Courts of General Sessions*

Courts of General Sessions, constituted under the *Local Courts Act 1896*, have been progressively discontinued since 1978 in conjunction with the transfer of local government courts to State administration which was completed in August 1980.

#### *The Supreme Court of Tasmania*

The Supreme Court of Tasmania is constituted by the Chief Justice and five Puisne Judges. Regular sittings of the Court are held at Hobart, Launceston and Burnie, although the Court is empowered, subject to the provisions of the *Supreme Court Civil Procedure Act 1932*, to sit and act at any time and at any place for the exercise of any part of the jurisdiction and business of the Court.

The Court has jurisdiction over all causes, both civil and criminal, except those reserved for the High Court of Australia under the Australian Constitution. It also exercises Federal jurisdiction in matters such as bankruptcy, etc. Its civil jurisdiction extends to all causes of action, whatever the amount involved may be, and its criminal jurisdiction includes the trial of all indictable offences. In civil cases, the Court has power to call in the aid of one or more assessors specially qualified to assist in the trial of the actions, but it is not bound by the opinion or advice of any such assessor.

There is a right of appeal to the Supreme Court of Tasmania from all inferior courts and from many statutory tribunals.

Law and equity are administered concurrently in the Court which is enjoined to grant, either absolutely or on such terms and conditions as seem just, all such remedies to which any of the parties may be entitled so that, as far as possible, all matters in controversy between the parties may be completely and finally determined, and a multiplicity of legal proceedings avoided. The judges, on the recommendation of the Rule Committee, are empowered to make rules regulating the practice and procedure of all proceedings in the Court.

The jurisdiction of the Court is usually exercised by a judge of the Court and from his decision there is a right of appeal to the Full Court of the Supreme Court of Tasmania. A Full Court consists of three or more Judges of the Court. The Full Court is also a Court of Criminal Appeal under the Criminal Code. The latter is a Court to which appeals may be brought by the Crown or by an accused person where an indictable offence is involved. In some cases, there is an appeal as of right but, in other cases, leave is required.

#### *The High Court of Australia*

This Court was created by the Constitution of the Commonwealth of Australia and it has both original and appellate jurisdiction. It is constituted by the Chief Justice of Australia and six other Justices.

Except in relation to an appeal that relates to the amount of any damages in respect of death or personal injury, there is a right of appeal to the High Court from a final judgment of a Full Court of the Supreme Court of the State in any civil matter where the sum involved amounts to at least \$20 000. In other cases (including criminal cases) there is an appeal to the High Court if special leave is granted.

Sittings of the High Court of Australia are held in Canberra. Provision is made, when there is sufficient business to warrant convening a sitting of the Court in Hobart, for the Court to travel to Hobart for the sittings.

#### *The Federal Court of Australia*

The Court created by the *Federal Court of Australia Act* 1976, is constituted by the Chief Judge and 23 other judges. The Court was created basically to reduce the work of the High Court, so that the High Court could give greater attention to its primary function as the interpreter of the Constitution. Consequently, the Federal Court was invested with original and appellate jurisdiction under a variety of statutes including the *Conciliation and Arbitration Act* 1904, the *Bankruptcy Act* 1966, the *Trade Practices Act* 1974 and the *Administrative Appeals Tribunal Act* 1975. Sittings of the Court are held in each capital city—there is a District Registry in each.

#### *Tribunals*

There are many tribunals which are not true courts and the powers and functions of these depend upon the detailed provisions of the particular statute under which they operate. Certain specialised courts have been created by statute. For example, the Wardens' Court is constituted under the *Mining Act* 1929.

#### *Coroners' Courts*

Coroners are appointed by the Governor and have jurisdiction throughout the State. Under the *Coroners Act* 1957, a coroner may hold an inquest: (i) concerning the manner of death of any person who has died a violent or unnatural death, who died suddenly

without the cause being known, or from 'sudden infant death syndrome' or 'cot death', or who died in a prison, or mental institution; at the direction of the Attorney-General, he may also be required to hold an inquest concerning any death; (ii) concerning the cause of any fire if the Attorney-General has directed, or has approved a request by the owner or insurer of the property; or at the request of the State Fire Authority or the Rural Fires Board.

The coroner usually acts alone in holding an inquest, but either the Attorney-General or the relatives of the deceased may request that a four or six-man jury be empanelled. After considering a post-mortem report the coroner may dispense with an inquest, unless the circumstances of death make an inquest mandatory under the Act.

The duty of the Court is to determine who the deceased was, and the circumstances by which he came to his death. Medical practitioners and other persons may be summoned to give evidence. In the case of the death of an infant in a nursing home, the coroner may also inquire generally into the conditions and running of the institution. On the evidence submitted at the inquest, the coroner can order a person to be committed to the Supreme Court and can grant bail. In the case of murder, a coroner can issue a warrant for apprehension.

#### *Children's Courts*

A 'child' in this jurisdiction is one under the age of 17 years. The Court before finally disposing of the case, must receive a report from a child welfare officer (the representative of the Director for Community Welfare), unless the Court considers the offence trivial or the Director decides not to provide one. A child's parent has the right to be heard and to examine and cross-examine witnesses, or to be represented by counsel; also a parent can be compelled to attend the hearing if this imposes no unreasonable inconvenience.

In summary proceedings, the Court is compelled not to enter a conviction against a child unless it imposes a sentence of imprisonment or there are special circumstances which indicate that a conviction should be recorded.

Children under 16 years cannot be sentenced to imprisonment and children of 16 years cannot be sentenced for more than two years, in aggregate. Minimum penalties imposed by statute do not apply to children; for those under 14 years the maximum fine is \$20, and for those over 14 years, \$100. The Court may impose a supervision order to bring the child under the guidance of a child welfare officer or, if over 15 years, of a probation officer. Alternatively, the Court may declare the child a ward of the State, placing him under the control of the Director for Community Welfare until his eighteenth birthday, unless released sooner; it may also direct that a ward be committed to an institution. In cases where further investigation appears necessary the Court may issue a remand for an observation order before it makes a final decision. Remands for observation orders are for short periods and usually provide for intensive supervision. (In the case of delinquency the maximum period for such an order is three months.)

Neglected or uncontrolled children are in the Court's jurisdiction; it may make a supervision order; an interim order (similar to a remand for observation order, the effect being to defer the transfer of guardianship until it is apparent that there is no suitable alternative); or impose wardship or bind the parents over to provide proper care and control, and comply with other directions. If parents have contributed to a child's offence by failing to control the child they may also be charged, convicted, fined, ordered to pay for damage and obliged to enter into a recognizance for the good behaviour of the child for up to 12 months.

Unlike a Children's Court the Supreme Court is in no way inhibited in imposing a penalty on a child. In addition to its ordinary sentencing powers, it may make supervision or wardship orders, and commit a child to an institution. If a child is sentenced to imprisonment, the responsible Minister may direct that the sentence be served in a place other than a gaol.

Statistics showing numbers of children appearing before Children's Courts by age, sex and alleged offence are given in the next two tables:



**Children Appearing Before Children's Courts, Tasmania(a), 1981-82**  
**Classified by Age and Sex**

Sex	Age (b) (in years)						Total (c)
	Under 7	7-8	9-10	11-12	13-14	15-16	
Boys .....	6	3	25	98	387	1 308	1 827
Girls .....	4	1	4	18	128	335	490
Total .....	10	4	29	116	515	1 643	2 317

(a) A child appearing twice or more before the Courts will appear twice or more in the table.

(b) Ages are at time of court hearing, not at time of offence.

(c) Includes 61 children (55 boys and 6 girls) who were 17 years old when appearing before the Courts but 16 at the time the alleged offences were committed.

**Children Appearing Before Children's Courts, Tasmania(a)**  
**Classified by Offence**

Offence alleged	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
<b>Relatively serious offences—</b>						
Damage to property .....	167	160	106	77	98	95
Breaking, entering and stealing .....	325	436	300	349	257	323
Stealing .....	616	619	391	455	428	438
Receiving .....	26	18	19	20	20	24
Illegal use of vehicles .....	292	207	131	91	91	62
Offences involving fraud .....	5	2	1	6	2	3
Sex offences .....	15	17	14	6	2	—
Other offences against the person ..	52	97	28	49	40	58
Offences against decency .....	10	18	14	4	45	35
Total .....	1 508	1 574	1 003	1 057	983	1 038
<b>Other offences—</b>						
Disorderly conduct .....	81	46	117	7	3	58
Traffic offences .....	634	508	498	364	358	368
Breaches of—Licensing laws .....	474	439	362	217	384	540
By-Laws .....	2	5	6	107	—	1
Firearms offences .....	9	29	33	19	22	28
Gaming .....	8	2	11	1	5	25
Trespass .....	27	14	13	15	26	138
Other .....	95	81	9	15	91	80
Total .....	1 330	1 124	1 049	745	889	1 238
<b>Complaints under Child Welfare Act—</b>						
Appearing as—Uncontrolled .....	32	20	12	26	—	—
Neglected .....	100	176	57	67	72	38
Breaches of supervision .....	8	8	13	14	3	3
Total .....	140	204	82	107	75	41
Total, all offences .....	2 978	2 902	2 134	1 909	1 947	2 317

(a) A child appearing twice or more before the courts will appear twice or more in the table.

In the preceding table, the figures relate to actual prosecutions. Where a report concerned multiple offences, the apparently more serious one has been listed. However, a child may be included more than once if more than one report has been made.

The following table shows the orders made by the courts as a result of these offences:

## Orders Made By Children's Courts 1981-82 (a)

Outcome	Boys	Girls	Total
Admonished and discharged	726	269	995
Conviction recorded	36	13	49
Declared ward	12	3	15
Declared ward and committed to institution	3	—	3
Fine	443	70	513
Good behaviour bond	47	15	62
Motor vehicle licence disqualification	28	1	29
Probation	50	15	65
Sentenced to imprisonment	12	—	12
Supervision CW Act	226	42	268
Unresolved at date of counting	111	24	135
Work orders	21	2	23
Other	91	16	107
Total	1 806	470	2 276

(a) Excludes complaints under the *Child Welfare Act*.

### Bankruptcy

The *Bankruptcy Act* 1966, an Act of the Federal Parliament, gives effect to two main principles of bankruptcy law; firstly, that when a person is unable to pay his debts or is otherwise in financial difficulties, then his assets or property, with limited exceptions, should be disposed of and the proceeds used to pay the creditors in proportion to the amounts owed to them; and secondly, that the debtor should be released from the burden of his debts and be enabled to make a fresh start by obtaining a discharge from bankruptcy.

Under the Act, a person unable to meet his debts may voluntarily present to the Registrar in Bankruptcy a petition against himself and thereby become bankrupt. Alternatively, a creditor may petition the Court for the sequestration of a debtor's estate where the debt is not less than \$1 000. When a debtor becomes bankrupt by either of these ways his property, and any after acquired property, vests in the trustee of his estate.

A person becoming bankrupt under the Act may be automatically discharged from bankruptcy after the expiration of three years (Section 149) unless discharged earlier by the Court. The Registrar or trustee, or a creditor with the leave of the Court, may lodge an objection to this type of discharge. If it is not withdrawn the debtor must apply to the Court under Section 150 if he desires to be discharged. However an objection will automatically lapse five years from the date of bankruptcy.

A debtor may avoid bankruptcy in some circumstances by authorising a registered trustee or a solicitor to call a meeting of his creditors to make arrangements for the payment of his debts that are acceptable to the creditors. The debtor's property is controlled by the trustee until the creditors resolve otherwise, or the court orders otherwise, or a deed of assignment or arrangement is executed, or a composition is accepted, or the debtor dies or becomes bankrupt.

The *Commonwealth Functions (Statutes Review) Act* 1981 substantially amended the *Bankruptcy Act* 1966. The major amendment provides for a private registered trustee to administer the estate of a debtor made bankrupt on either his own or a creditor's petition, instead of the Official Trustee, unless the Court is satisfied either that the value of the debtor's estate is less than \$10 000 or that the petitioning debtor or creditor has been unable to obtain the consent of a registered trustee to administer the estate. If the Court is satisfied as to either of these two criteria the estate is then administered by the Official Trustee.

## Bankruptcy Proceedings, Tasmania

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Bankruptcies and orders for administration of deceased debtors' estates—						
Number .....	148	223	267	287	294	295
Liabilities ..... \$'000	1 607	2 222	3 756	5 012	4 213	5 207
Assets ..... \$'000	541	727	2 248	1 329	664	646
Deeds of assignment, arrangement, composition and schemes—						
Number .....	8	13	22	6	17	14
Liabilities ..... \$'000	386	1 048	2 202	637	1 475	2 518
Assets ..... \$'000	304	594	800	343	931	817
Total—						
Number .....	156	236	289	293	311	309
Liabilities ..... \$'000	1 993	3 270	5 958	5 649	5 688	7 725
Assets ..... \$'000	845	1 321	3 048	1 672	1 595	1 463

## The Licensing Board

On 10 August 1977 the *Licensing Act*, 1976 was proclaimed which heralded a new era in licensing in Tasmania and made this State one of the trend setters along with the ACT on which our legislation is based. The control of licensing was vested in the Licensing Board of Tasmania.

The regulation of licensing is not new or unique to Tasmania. All states and territories and most countries have a system of licensing to ensure that the public can enjoy liquor in pleasant surroundings and in an atmosphere of conviviality. There are of course problem areas and the Act provides for the general public to lodge complaints in relation to any matters of public concern, e.g. noise, behaviour of patrons, etc.

The Board set standards in respect of all licensed establishments and inspections are carried out at least once a year by a Licensing Inspector, a Health Officer and a Fire Protection Officer.

The Licensing Board of Tasmania, appointed by the Governor comprises: a Chairman; two members, (one of whom must be a legal practitioner or barrister) and a deputy member (who must be a legal practitioner or barrister) who may act as Chairman or member as the need arises.

The Administrator for the Board is the Commissioner for Licensing. A Chief Inspector of Licensed Establishments and Inspectors are appointed under the Act.

The following licences may be granted under the Act, namely:

- (i) *General licences*—issued in respect of hotels which provide for the sale of liquor for consumption both on and off the premises;
- (ii) *On licences*—issued in respect of restaurants which provide for the sale of liquor for consumption on the premises;
- (iii) *Club licences*—issued in respect of sporting clubs, RSL clubs etc. authorising the sale of liquor at licensed clubs;
- (iv) *Off licences*—issued in respect of wholesale liquor outlets for the sale of liquor in quantities of 9 litres or more for consumption off the premises.

General, On, and Off licences may be issued on limitations relating to:

- (i) the kinds of liquor that may be sold and
- (ii) the classes or descriptions of persons to whom liquor may be sold.

Some examples of limited licences are Hobart Pacific Motor Inn (Limited General) Albert Hall Convention Centre (Limited On) and Heemskerk Vineyards (Limited Off).

Under the legislation, as it exists at the moment, the Board advertises for objections in relation to applications for Off and Club licences.

The following table shows the number of operative licences as at 30 June 1983:

<i>General</i>	<i>Limited</i>	<i>General</i>	<i>On</i>	<i>Limited</i>	<i>On</i>	<i>Club</i>	<i>Off</i>	<i>Limited</i>	<i>Off</i>	<i>Total</i>
289	2	93	37	196	46	1	670			

## PRISONS

### *General*

The establishment, regulation and conduct of prisons and the custody of prisoners in Tasmania are provided for under the *Prison Act* 1977 which repealed the *Prison Acts* 1868 and 1908. Provision is made for the appointment, by the Governor, of a Controller of Prisons who is responsible for the supervision of prisons, including the initiation and implementation of correctional programs for prisoners and staff training schemes.

Every two years, two appointments are made to the position of Official Visitor to each institution. They visit the prison at least once per month to examine the treatment, behaviour and condition of prisoners, and the condition of the prison.

The main prison in Tasmania is at Risdon near Hobart, which has as an outstation, the Prison Farm at Hayes in the Derwent Valley. The Launceston Prison functioned as a holding centre for prisoners from the northern districts of the State prior to their transfer to Risdon. During 1977-78 that prison was abandoned and the prisoners were transferred to the new Police Headquarters building. Since then the Police Department have taken over the financial responsibility for the operation and control of remandees in Launceston.

The following table shows Prisons Department expenditure from Consolidated Revenue:

**Prisons Department: Expenditure From Consolidated Revenue, Tasmania**  
(S'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Total expenditure .....	3 510	4 020	4 640	5 291	5377
Net receipts (a) .....	182	164	131	171	362
Net expenditure .....	3 328	3 856	4 509	5 120	5 015

(a) From prison industry and gaol farm activities described later in the text.

### *Capital Punishment*

The death sentence has not been carried out in Tasmania since 1946, but judges pronounced the sentence from time to time until 1968. In October 1968, the Attorney-General introduced a bill to abolish capital punishment and this was passed by the Parliament in December of that year.

### *Prisoners Received and Discharged*

In 1982-83, 1 022 male and 213 female prisoners were received into HM Prison, Risdon. In that period 1 055 male and 212 female prisoners were discharged. At 30 June 1983 there were 200 male and 5 female prisoners in custody. The figures include persons held on remand. The number of convicted prisoners received during 1982-83 was 565 males and 27 females.

### *Prisoners' Offences*

The following table shows the offences for which convicted prisoners were received:

## Offences (a) for Which Convicted Prisoners Were Received into Gaol in Tasmania.

Offence for which convicted	1981-82		1982-83			
	Persons		Males	Females	Persons	
	Number	Proportion of total			Number	Proportion of total
Offences against the person—						
Common assault .....	44	2.00	59	6	65	2.33
Assault police .....	13	0.59	20	2	22	0.79
Indecent assault .....	21	0.95	24	—	24	0.86
Other .....	36	1.64	25	—	25	0.89
Total .....	114	5.18	128	8	136	4.87
Offences against property—						
Stealing .....	533	24.23	486	591	1 077	38.55
Burglary and breaking offences .....	396	18.00	343	29	372	13.31
Steal a motor vehicle .....	84	3.82	71	1	72	2.57
Damage to property .....	40	1.82	39	4	43	1.54
Obtain goods by false pretences .....	182	8.27	178	22	200	7.16
Forgery, uttering and currency offences .....	74	3.36	89	36	125	4.47
Other .....	129	5.86	88	13	101	3.61
Total .....	1 438	65.36	1 294	696	1 990	71.22
Offences against good order—						
Breach of probation order .....	25	1.14	32	1	33	1.18
Breach of suspended sentence .....	62	2.82	74	—	74	2.65
Breach of bail .....	28	1.27	16	—	16	0.57
Breach of work orders .....	28	1.27	20	—	20	0.72
Non-payment of fines .....	86	3.91	132	2	134	4.80
Other .....	78	3.55	19	11	30	1.07
Total .....	307	13.95	293	14	307	11.00
Traffic offences—						
Drive whilst licence disqualified .....	171	7.77	170	—	170	6.08
Dangerous driving .....	16	0.73	12	—	12	0.42
Exceed .08 and .05 per cent .....	89	4.05	92	1	93	3.32
Driving under influence .....	20	0.91	14	—	14	0.50
Other .....	25	1.14	44	—	44	1.57
Total .....	321	14.59	332	1	333	11.92
Offences against the <i>Dangerous Drugs Act</i> .....	20	0.91	28	—	28	1.00
Grand Total .....	2 200	100.00	2 075	719	2 794	100.00

(a) The number of offences exceeds the number of prisoners received since some prisoners were convicted of multiple offences.

The next table classifies convicted prisoners according to the number of their previous convictions:

## Convicted Prisoners Received into Gaol in Tasmania, 1982-83, According to Number of Previous Convictions (a)

Prisoners	Number of previous convictions				Total
	Nil	One	Two	Three or more	
Number received .....	267	120	47	158	592
Percentage of total .....	45.1	20.3	7.9	26.7	100.00

(a) Previous convictions may not necessarily have involved imprisonment.

*Age of Prisoners*

Young offenders account for a high proportion of receptions. The proportion of convicted male prisoners under 25 years was: 63 per cent in 1978-79; 60 per cent in 1979-80; 57 per cent in 1980-81; 54 per cent in 1981-82 and 52 per cent in 1982-83. The following table shows the age of convicted prisoners admitted to prison:

Ages of Convicted Prisoners Received into Gaol in Tasmania, 1982-83

Sex	Age group (in years)								Total
	16-17	18-19	20-24	25-29	30-39	40-49	50-59	60 and over	
Males .....	36	85	171	110	86	44	24	9	565
Females .....	4	4	4	1	7	6	1	—	27
Total .....	40	89	175	111	93	50	25	9	592

*Parole and Remission of Sentences*

Good conduct remissions of up to one third of the sentence for prisoners sentenced to over three months may be granted by the Controller of Prisons.

On 31 March 1976, the *Parole Act* 1975 was brought into effect by proclamation. This Act repealed the *Indeterminate Sentences Act* and provided machinery for the appointment of a three-member Board to deal with the granting of parole to prisoners who had served six months or one third of their sentence, whichever was the greater. It also provided for the Board to make recommendations in relation to the release of prisoners who were serving life sentences or who were dangerous criminals.

*Risdon Prison*

The Risdon Prison, with provision for 333 prisoners, was opened in November 1960. Male prisoners were then transferred from the old Hobart Gaol and, in June 1963, the Female Prison, the first entirely separate prison for women to be built in the State, was opened on the Risdon site. The following table shows the daily average and highest number of prisoners at Risdon Prison over a six-year period:

Number of Prisoners, Risdon Prison (a)

Prisoners	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Maximum number .....	269	343	309	269	281	400
Daily average .....	241	306	280	249	246	229

(a) Includes Hayes Prison Farm.

The Risdon Prison incorporates workshops which serve as a basis for vocational and trade training in such subjects as woodworking, tailoring, sheet metal working, laundry and breadmaking. Educational services include: instruction during working hours for illiterate and semi-literate prisoners; private study during evenings in general academic subjects to Secondary Schools Certificate standard; correspondence courses in University, School Certificate, Higher School Certificate and various technical and commercial subjects; tuition in English for migrants; and training in art and allied subjects. A classification committee interviews all prisoners on admission and decides on each individual's training program.

Groups meet regularly for woodcarving, art, pottery, toy making and chess. Feature and documentary films are screened fortnightly. The Prison Debating Society debates regularly against outside teams. The Education Section publishes a prison magazine periodically. A comprehensive sports program is conducted including athletics, gymnastics and competitions in cricket, volleyball, basketball and football.

The State Library of Tasmania helps with the Prison library, providing a generous supply of books on a rotational basis, to supplement the stock of books owned by the Department. Over 5 000 volumes are immediately available for selection and prisoners may order books of special interest from the State Library System. The Prison library has been designed to develop the library atmosphere. Some 1 100 books are borrowed weekly from the library, all records being kept by prisoner librarians who receive advice from State Library officers.

A new security hospital was completed in 1978 to cater for both the physically ill prisoners and those suffering psychiatric disorders. The unit will accommodate up to 28 bed patients. Daily medical parades are conducted in the hospital for prisoners requiring out-patient type treatment. The building has a fully equipped dental surgery, treatment rooms, physiotherapy and occupational therapy rooms as well as a dispensary and accommodation for medical and para-medical staff.

Prison industries produce articles for government departments and institutions. The following table shows the receipts for prison industries over a five-year period. A laundry installed in 1963 contributes to receipts from sales and services but the amounts are not a true indication of value to the Government, as laundry and other services are provided at a nominal figure for hospitals and other government institutions.

Prison Suspense Account (Prison Industries), Tasmania  
(\$)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Receipts (a) .....	247 946	285 473	318 879	397 826	456 739	577 565
Paid to Consolidated Revenue	30 632	63 658	94 728	77 231	99 294	80 656

(a) Maintenance and material charges are met from receipts, the balance being paid to Consolidated Revenue in the following year.

#### Hayes Prison Farm

The Prison Farm at Hayes ('Kilderry') is an outstation of the Risdon Prison. It is used to prepare men for a normal way of life through operation of the honour system. Up to 70 prisoners who are regarded as being worthy of trust, regardless of their age, length of sentence or type of offence, are held there.

The following table shows the receipts from sale of farm produce and the amounts paid to Consolidated Revenue over a six-year period:

Prison Farm Suspense Account, Tasmania  
(\$)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Receipts (a) .....	224 858	255 277	293 098	316 058	337 296	355 672
Paid to Consolidated Revenue	55 042	33 865	87 251	70 000	31 680	90 385

(a) Maintenance and material charges are met from receipts, the balance being paid to Consolidated Revenue in the following year.

The 567 hectare property has been developed into a model farm with a great diversity of farming activities. These include: approximately 26 hectares for vegetables; a registered stud of Friesian cattle and Herefords; about 2 000 sheep for wool and fat lambs; a registered herd of Berkshire pigs; poultry; cropping of wheat, oats, lucerne and hay; breeding of children's ponies; and hot house cultivation. In May 1969, 125 hectares of land was purchased near New Norfolk. This property, about two kilometres north of the Hayes Prison Farm, functions as an annexe to the Hayes property. During 1970-71 a sawmill was established on the property but this was subsequently destroyed by vandals and was not rebuilt. A further 100 hectares adjacent to this property was purchased during 1974-75. The Royal Derwent Hospital farm of 297 hectares, including the dairy herd and poultry section, was transferred to the Prisons Department during 1971. Whole milk is

produced and sold in bulk for general use. Building construction activities and machinery maintenance workshops also provide employment, but this range of prison industries is more limited than at Risdon. Similar educational and recreational facilities to those at Risdon are provided.

A new development has taken place recently in the upgrading of the farm's piggery section. Production has been converted to an intensive system housed in two large sheds. One of these is a sow and litter shed with a capacity for 140 breeding sows whilst the other is a fattening shed. It is expected that an annual production of approximately 2 500 porkers and replacement stock will be achieved when the system is fully operational. All of the work has been carried out by inmates under the supervision of departmental staff.

#### *The Probation and Parole Service*

The service was established in 1946 and is a division of the Attorney-General's Department. The service is headed by the Chief Probation and Parole Officer, and of the total complement of 60 officers, 43 are probation and parole officers and 17 are clerical and support staff. The head office of the Service is located in Hobart, and there are district offices at Launceston and Burnie and branch offices at Bellerive, Devonport, George Town, Glenorchy and Queenstown. In addition, there are individual probation and parole officers stationed at New Norfolk, Huonville, Ulverstone, Railton and Scottsdale, on a part-time basis.

The main functions of the Service are to provide supervision of persons released from the courts on probation or discharged from prison on probation or parole. Counselling in respect of personal and family matters is offered, as is practical assistance in providing suitable employment wherever possible, and accommodation.

The service undertakes investigations and compiles pre-sentence reports on offenders for the courts and pre-release reports for the Parole Board. In addition, it administers the Work Order Scheme, which was developed and introduced into the Tasmanian criminal justice system in 1972 and which has many benefits for both the offender and the community. From 1 October 1981 work orders became a sentencing option in their own right and ceased to be treated as an alternative to prison.

### THE TASMANIAN POLICE

#### *Organisation*

The Police Department is headed by the Commissioner of Police who is responsible to the Minister for Police. The Commissioner is assisted by a Deputy Commissioner and two Assistant Commissioners. The highest uniform rank in the Force is that of Chief Superintendent.

The State is divided into three geographical districts with headquarters at Hobart, Launceston and Burnie. The Force also has four specialist branches: Recruitment and Training; Criminal Investigation; Traffic; and Management Services. Each district and branch is under the control of a Superintendent.

#### *General Policing*

General policing is performed by uniform personnel who maintain beat patrols on foot in conjunction with vehicular patrols. Beat police are equipped with radios and are in constant touch with their bases.

#### *Recruitment and Training*

During May 1983, it was decided to discontinue both police cadet training courses and the 24 week adult recruit training courses and introduce a 44 week course to encompass an age group extending from 18 to 33 years of age. Regular in-service courses are conducted from personnel drawn from all ranks and all parts of the State. The Rokeby Academy has administrative, classroom and residential blocks, together with a pistol range, parade ground, library, lecture-theatre, gymnasium and driver training complex.



*SPRING IN TASMANIA*

*Poppies growing near Forth in North-West Tasmania*  
[Copyright Edward Gall]







*Wild flowers growing near Sorell* [Copyright Edward Gall]



*Blackwood in flower* [Copyright Elizabeth Holloway]

*Lupins growing at Adventure Bay, Bruny Island* [Copyright Edward Gall]





Single-room accommodation is available for 120 students. Classrooms are equipped with audio-visual educational devices, including closed-circuit television.

### *Criminal Investigation*

While all personnel in the Force have a responsibility for crime detection the Criminal Investigation Branch personnel specialise in this field—members are divided into specialised sections, including the Drug Bureau and Gaming Squad.

### *Traffic Control*

The Traffic Control Branch is responsible for enforcing regulations for the Transport Commission and deploys personnel in cars and on motor cycles. It makes use of sophisticated mechanical and electronic devices.

### *Management Services*

All support services, including the Information Bureau, Scientific Bureau, Planning and Research, Search and Rescue, Transport and Communications Sections, are part of the Management Services Branch.

The Information Bureau maintains a record of previous convictions, property tracing, *modus operandi* of crimes, missing persons and warrants issued as well as statistics on crimes and offences reported and cleared.

The Scientific Bureau provides specialist services in the fields of: (i) Fingerprinting. It has on file approximately 115 000 fingerprint sets. Close liaison is maintained with interstate and overseas sources as well as with the Central Fingerprint Bureau in Sydney. (ii) Photography. Duties involve attendance at the scene of major crimes and serious road accidents. Photogrammetric plans are produced. (iii) Ballistic examinations are provided, together with the maintenance of a ballistics library. (iv) Documents and drawing. Activities include examination of forged documents and use of 'Photo-fit' equipment to aid in the identification of offenders.

The Planning and Research Section is responsible for studying and improving existing work procedures and making recommendations on planning for future development.

A well equipped Search and Rescue Squad is based at Hobart and is augmented by part-time members from other sections of the Force. Duties include rescues from the bush, mountains, cliffs, caves, at sea and underwater. Valuable support is received from walking, climbing and boating organisations. A powerful motor launch, *Vigilant*, with a sea range of 1 300 kilometres is located at Hobart. Smaller craft are stationed at points around the State coastline and at inland waterways.

The mobility of the Force is provided by a fleet of 400 vehicles, including motor cycles, caravans and mobile headquarters.

Radio and telex systems operate both intrastate and interstate. Radio is installed in most cars, boats and motor cycles giving a statewide coverage.

### *Division of Road Safety*

The Division is headed by the Director of Road Safety. It is principally concerned with the development and implementation of Government road safety policy and legislation. It complements facilities available through other departments, authorities, private enterprise and voluntary organisations to ensure that available resources are fully used and co-ordinated.

A school road safety education program is operated throughout the State. Nine mobile Road Safety Officers are employed and supervise 60 part-time Adult Crossing Guards. In addition to school education, the Division is responsible for the preparation and dissemination of general road safety publicity material. Statistics concerning road crashes are used in assessing the value of instituted policies and in the development and initiation of new schemes to promote road safety throughout Tasmania.

*Strength of Force*

The following table shows the number of police and expenditure:

Tasmania Police: Number and Cost					
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
Police officers (a) .....	no. r 1 041	r 1 037	1 029	1 041	1 006
Persons per police officer (a) .....	no. r 403	407	r 413	411	428
Cost (total expenditure of Police Department) .....	\$'000 23 346	25 764	28 656	34 986	35 653
Cost per head of mean population .....	\$ r 55.69	r 61.02	67.38	81.64	82.76

(a) At 30 June.

**EMERGENCY SERVICES****State Emergency Service**

Following a series of discussions at Federal and State levels the Tasmanian Government, in 1962, decided, in common with other States, to establish a Civil Defence and Emergency Services Organisation for Tasmania. The Government considered that in addition to its intended role in time of war the organisation should be organised and trained to assist in combating natural emergency situations. A Director of Civil Defence and Emergency Services was appointed to plan the new organisation and exercise overall control of volunteer units. In April 1975 the title was changed to State Emergency Service in common with other states. Ministerial responsibility for the State Emergency Service is vested in the Minister for Police and Emergency Services. On 12 February 1981 the Service was transferred as an autonomous body to the Police Department. By proclamation of the Governor of Tasmania the Commissioner of Police was appointed Director of Emergency Services in addition to his office as Commissioner of Police on 24 March 1981. In the execution of his powers under the *Emergency Services Act* (Section 18) the Director of Emergency Services delegated all his powers, authorities, functions and duties to the Deputy Director State Emergency Service, except those which provide the instruments to direct Government policy within the Service and to assume command in a declared State of Disaster or Special Emergency within the meaning of the Act. The Deputy Director State Emergency Service is the State contact for all emergency service matters.

*Legislation*

On 1 July 1976, the *Emergency Services Act* came into force. This legislation formally established the State Emergency Service, and set up a counter disaster control structure for dealing with any major emergency or disaster that might affect the State. Under this legislation the State Emergency Service was given wider functions and responsibilities, and the responsibilities of municipalities and other bodies were also set out. Under the Act, when a state of disaster is declared, control is vested in a State Disaster Executive, consisting of the Commissioner of Police, the Director of Emergency Services, and the Ministerial Liaison Officer (Emergency Services).

*Functions*

The State Emergency Service has the responsibility for ensuring that the community is adequately prepared to meet any disaster situation that may arise. To this end the Service has the roles of co-ordinating emergency planning, provision and co-ordination of emergency training, and co-ordinating all supporting and ancillary emergency organisations in support of police and other authorities in time of emergency or disaster. The Service is responsible for the oversight and production of Counter Disaster Plans at municipal, regional and state level. To advise the Service in this function, specialist planning committees, incorporating senior representatives from government departments and instrumentalities, volunteer organisations and emergency services have been formed in the fields of transport, communications, medical care, welfare and public information.

To ensure adequate communications during periods of disaster, the Service has developed a system of communications covering Tasmania with links to the mainland. The communications system provides great flexibility and reliability, and is available for use by all emergency services.

In time of enemy action or hostilities against the State, the State Emergency Service is the co-ordinating authority of all civil defence measures as defined by the Commonwealth and State Governments.

#### *Administrative Structure*

State Emergency Service administration in Tasmania is organised on a three-level basis; municipal, regional and state. The State is divided into three regions, centred on Hobart, Launceston and Burnie. Each region is administered by a full-time regional officer assisted by a staff officer, and operations within regions are co-ordinated from regional emergency operations centres. State headquarters (Hobart) is also responsible for maintaining and operating the State Emergency Operations Centre.

#### *Training*

Training is undertaken at state and regional headquarters and at municipal level. The State Emergency Service is responsible for the nomination of Tasmanian representatives attending courses and seminars at the Australian Counter Disaster College, Mount Macedon, Victoria. The Service also conducts a variety of counter disaster skills and procedure courses for other Tasmanian emergency services and for involved members of the public, private enterprise and various government departments.

#### *Equipment and Finance*

Certain items of protective clothing, operational and training equipment for use by the Service are provided annually by the Federal Government through the Natural Disasters Organisation. Certain regional staff salaries are funded by the Commonwealth. All other funding is by the State Government.

### **Fire Prevention and Fire Fighting**

#### *State Fire Commission*

Under the provisions of the *Fire Service Act 1979*, which was proclaimed on 1 November 1979, a new single Tasmania Fire Service was created. The State Fire Authority, the Rural Fires Board, and all Urban Fire Brigade Boards which had previously administered the several fire services, were abolished and their functions were assumed by a new State Fire Commission.

The Commission consists of the Commissioner, the Director of Urban Brigades, the Director of Country Brigades, two representatives of local government and a representative of the Treasurer.

The State is divided into three regions (Southern, Northern, and North-Western) each under the control of Regional Chief Officers who *inter alia* are responsible for the development of programs of hazard reduction in urban and country areas and protection of life and property; each having regional administrative support. The operational branches of the Service comprise 39 urban brigades and some 367 country fire brigades. Hobart and Launceston brigades are almost totally manned by permanent officers and firefighters while the brigades at Burnie and Devonport are manned by a combination of permanent officers and firefighters, and partly-paid volunteers. All other urban fire brigades are manned by partly paid volunteers; all country fire brigades are manned by unpaid volunteers.

A central Training Division is responsible for the development of training programmes and the training of permanent staff and volunteers of both urban and country brigades. An Operations Division is responsible for the development of effective communications, operational systems, facilities and procedures. The Fire Prevention Division

is responsible for inspection of premises, ensuring that general fire regulations are adhered to, and public education on fire prevention and protection matters.

A central Administration Division of the Fire Service has been developed by the amalgamation of the administrative sections of all previous branches and is responsible, through the Commissioner, to the State Fire Commission.

A Fire Service Advisory Council has been established under the *Fire Service Act 1979* to: advise the Minister for Police and Emergency Services on any matters affecting the administration of the Act referred to it by him; advise the Commission on any matters relating to preventing and extinguishing fires referred to it by the Commission; and advise the Commission on any matter that should, in the opinion of the Council, be brought to the attention of the Commission. The Council, under a Chairman appointed by the Governor, consists of 17 members representing Tasmania Police, Forestry Commission, Municipal Association of Tasmania, Tasmanian Farmers and Graziers Association, State Fire Commission Officers' Association, Royal Australian Institute of Architects, Forest Industries Association, pulp and paper manufacturers and woodchip exporters, United Firefighters' Union, Urban Volunteer Firefighters Association, Country Fire Brigades Association, Commissioner of the State Fire Commission, Director of Urban Brigades and Director of Country Brigades.

The funding provisions of the *Fire Service Act 1979*, provide for the ratepayers' contribution to the Fire Service to be related to the cost of operating that category of fire brigade which services the ratepayers' property. The State Government is required to meet the full amount of the costs of those components of the Fire Service which do not have a direct relationship to actual brigade operating costs. In addition, contributions are raised by way of an impost on the insurance industry and by the introduction of a levy on motor vehicle registration, the total of which is used to offset the cost of operating fire brigades.

#### Further References

##### *ABS Publications*

Court Statistics, Tasmania (4502.6), annual.

Prison Statistics, Tasmania (4503.6), annual.

Police Statistics, Tasmania (4504.6), annual.

Year Book Australia (1301.0), annual.

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## Chapter 10

### LABOUR, WAGES, AND PRICES

#### EMPLOYMENT

#### Labour Force and Employment

It is essential to distinguish between 'labour force' and 'employees' since *employment* statistics in this chapter relate mainly to wage and salary earners. These are, however, *only one component of the labour force* which also comprises employers, self-employed persons, unpaid helpers and unemployed persons.

#### *Labour Force*

Since the 1966 Census, a set of questions, based on activity in the week before the Census, has been asked to establish who should be included in the labour force. Briefly, the questions ask whether the person: (i) had a job or business of any kind last week (even if temporarily absent from it); (ii) did any work at all last week for payment or profit (unpaid helpers who worked were to answer *yes*); (iii) was temporarily laid off by his employer without pay for the whole of last week; and (iv) looked for work last week (ways of 'looking for work' were specified on the Census form).

The 1966, 1971, 1976 and 1981 labour force included all persons answering *yes* to any one of these four questions. The effect of the new definition was to include additional persons in the labour force. This applied particularly to those working part-time (sometimes for only a few hours a week), some of whom in earlier censuses may not have considered themselves as '... engaged in an industry, business, profession, trade or service'.

The total of persons recorded as unemployed in 1976 and 1981 was compiled from persons answering *no* to questions (i), (ii) and (iii) and *yes* to question (iv).

The following table shows that over the five years 1976 to 1981, male employment stagnated, there was some growth in female employment, the number of unemployed people; male and female, doubled, the male labour force participation rate decreased and the female labour force participation rate increased.

**Labour Force Status of Population Aged 15 Years and Over, Tasmania**  
(\*000)

<i>Labour force status</i>	<i>30 June 1976 (a)</i>			<i>30 June 1981</i>		
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Employed .....	108.3	55.7	163.9	109.3	61.1	170.4
Unemployed .....	4.0	2.7	6.7	8.5	5.6	14.1
Labour force .....	112.3	58.3	170.6	117.9	66.7	184.5
Not in labour force .....	30.2	86.4	116.6	34.8	90.1	124.8
Total population aged 15 years and over.	142.5	144.7	287.2	152.6	156.7	309.4

(a) The 1976 census figures are based on a sample of approximately 50 per cent of census schedules which were processed.



## Labour Force Estimates (Intercensal)

*The Population Survey*

Population censuses tend to be expensive undertakings and are therefore held only at five-yearly intervals. However the demand for regular *census-type* information exists right through the intercensal periods; the most sought data are those describing the labour force. To meet this demand, the Bureau designed in 1960 a special sample of private households and non-private dwellings under the title 'population survey' and it trained teams of interviewers to contact the selected sample units by personal visit with the aim of filling in questionnaires on the spot.

The population survey can be used to collect an extremely wide range of data but the main routine application has been the labour force inquiry, conducted in February, May, August and November of each year up to February 1978 and monthly, thereafter. The questionnaire is filled in for persons 15 years and over within each sampled unit and the definitions of employment, unemployment, etc., are basically the same in concept as those used in population censuses. Naturally the estimates are subject to sampling error. The reliability of estimates based on sample surveys are measured by the 'standard error'. The specialist reader is referred to the Bureau's Canberra Office publication *The Labour Force* (Cat. No. 6203.0), where tables appear stating the standard errors associated with the estimates. The following table gives details of elements of the civilian labour force based on estimates derived from recent population surveys.

Civilian Population 15 Years of Age and Over, by Labour Force Status, Tasmania (a)

Month	Employed (b)		Unemployed (c)		Total labour force (d)		Not in labour force ('000)	Civilian population aged 15 and over ('000)	
	Agri-culture ('000)	Other indus-tries ('000)	Total ('000)	Number ('000)	Per cent of labour force	Number ('000)			Per cent of popula-tion
Males									
1980—									
August .....	7.6	105.4	113.0	5.7	4.8	118.8	77.1	35.3	154.1
November .....	8.2	104.8	113.1	5.9	4.9	118.9	76.9	35.6	154.6
1981—									
February .....	7.4	108.5	115.9	6.8	5.6	122.7	79.2	32.2	155.0
May .....	8.9	106.8	115.7	5.5	4.5	121.2	78.0	34.2	155.5
August .....	8.4	103.3	111.8	7.8	6.5	119.6	76.8	36.1	155.7
November .....	9.2	103.0	112.2	6.6	5.5	118.8	76.2	37.1	155.9
1982—									
February .....	9.3	103.1	112.5	10.6	8.6	123.1	78.9	32.9	156.0
May .....	8.7	100.9	109.6	10.9	9.1	120.6	77.1	35.8	156.3
August .....	7.6	101.2	108.9	10.7	8.9	119.5	76.2	37.3	156.9
November .....	7.8	98.2	106.0	12.1	10.3	118.1	75.0	39.4	157.5
1983—									
February .....	9.9	96.1	105.9	14.8	12.2	120.7	76.4	37.3	158.0
May .....	8.8	97.4	106.2	13.6	11.4	119.8	75.7	38.4	158.2
August .....	9.0	98.4	107.4	11.9	10.0	119.3	75.3	39.2	158.6

continued next page

## Civilian Population 15 Years of Age and Over, by Labour Force Status, Tasmania (a)—continued

Month	Employed (b)		Unemployed (c)			Total labour force (d)		Not in labour force ('000)	Civilian population aged 15 and over ('000)
	Agri- culture ('000)	Other indus- tries ('000)	Total ('000)	Number ('000)	Per cent of labour force	Number ('000)	Per cent of popula- tion		
Females									
1980—									
August .....	2.4	57.7	60.1	3.8	6.0	63.9	40.7	93.1	157.0
November .....	2.7	58.4	61.1	5.2	7.9	66.3	42.0	91.6	157.9
1981—									
February .....	3.0	58.0	61.0	5.9	8.8	66.9	42.0	92.5	159.4
May .....	3.3	60.3	63.6	4.6	6.7	68.2	42.5	92.4	160.6
August .....	2.8	58.4	61.2	5.9	8.8	67.1	41.6	94.4	161.5
November .....	2.9	58.4	61.4	5.7	8.5	67.1	41.3	95.1	162.2
1982—									
February .....	2.3	55.1	57.4	7.5	11.5	64.8	39.8	98.1	162.9
May .....	2.4	56.9	59.3	6.5	9.9	65.8	40.3	97.6	163.4
August .....	3.0	56.5	59.6	6.9	10.4	66.5	40.6	97.4	163.9
November .....	2.3	59.9	62.1	6.1	8.9	68.2	41.5	96.2	164.4
1983—									
February .....	2.7	57.3	60.1	7.2	10.6	67.2	40.8	97.6	164.8
May .....	2.8	57.9	60.8	7.3	10.7	68.1	41.2	97.0	165.1
August .....	2.0	56.9	58.9	6.9	10.4	65.8	39.7	99.7	165.5
Persons									
1980—									
August .....	10.0	163.1	173.1	9.5	5.2	182.6	58.7	128.5	311.1
November .....	10.9	163.2	174.2	11.1	6.0	185.3	59.3	127.2	312.5
1981—									
February .....	10.3	166.5	176.9	12.8	6.7	189.6	60.3	124.8	314.4
May .....	12.2	167.2	179.4	10.1	5.3	189.5	59.9	126.6	316.1
August .....	11.2	161.8	173.0	13.7	7.3	186.7	58.9	130.5	317.2
November .....	12.2	161.4	173.6	12.3	6.6	185.9	58.4	132.2	318.1
1982—									
February .....	11.6	158.2	169.9	18.1	9.6	188.0	58.9	130.9	318.9
May .....	11.1	157.8	168.9	17.5	9.4	186.4	58.3	133.4	319.7
August .....	10.6	157.8	168.4	17.6	9.5	186.0	58.0	134.7	320.7
November .....	10.1	158.1	168.1	18.2	9.8	186.3	57.9	135.5	321.9
1983—									
February .....	12.6	153.4	166.0	21.9	11.7	187.9	58.2	134.9	322.8
May .....	11.6	155.3	166.9	20.9	11.1	187.8	58.1	135.5	323.3
August .....	11.0	155.3	166.3	18.8	10.1	185.1	57.1	139.0	324.1

(a) This series is based on a regular survey of a sample of the population. The estimates relate to all persons aged 15 years and over with the exception of members of the permanent armed forces and certain diplomatic staff.

(b) Includes all those who, during the survey week: (i) worked for one hour or more for pay or profit; or (ii) worked 15 hours or more without pay in a family business (or farm); or (iii) were employees who had a job but were not at work and were on paid leave, leave without pay for less than four weeks up to the end of the survey week, stood down, on strike or locked out, on workers' compensation and expected to return to their jobs or receiving wages and salaries while undertaking full-time study; or (iv) were employers or self-employed persons who had a job, business or farm but were not at work.

(c) Includes all those who, during the survey week, were not employed and who: (i) did not have a job and were actively seeking full-time or part-time work, or (ii) who were laid off without pay for the whole week.

(d) Includes all those classified as employed or unemployed during the survey week.

**Employment by Industry, Tasmania (a)**  
(<sup>'000</sup>)

Industry									
Month	Agriculture and services to agriculture	Manufacturing	Construction	Wholesale and retail trade	Finance property, business services	Community services	Recreation, etc.	Other industries (b)	Total
Males									
August—									
1978 .....	9.5	22.9	14.4	19.6	6.6	9.5	4.0	24.7	111.2
1979 .....	9.0	22.3	13.6	20.6	4.9	10.6	4.6	26.3	111.9
1980 .....	7.6	23.3	13.7	19.8	7.2	11.0	4.1	26.3	113.0
1981 .....	8.4	22.1	13.0	19.7	6.3	12.5	4.5	25.2	111.8
1982 .....	7.6	20.7	12.4	17.8	5.5	13.6	4.6	26.7	108.9
1983 .....	9.0	20.1	9.3	17.7	6.6	11.3	4.8	28.6	107.4
Females									
August—									
1978 .....	2.3	5.1	(c)	13.0	5.1	18.4	5.4	4.5	54.7
1979 .....	2.3	5.1		15.6	5.4	17.8	8.0	5.4	61.3
1980 .....	2.4	4.1		12.9	7.0	18.9	7.2	6.1	60.1
1981 .....	2.8	5.6		12.6	4.3	21.3	6.9	6.7	61.2
1982 .....	3.0	3.6		11.9	4.5	22.3	7.2	5.9	59.6
1983 .....	2.0	5.0		11.9	5.4	20.7	7.5	5.6	58.9
Persons									
August—									
1978 .....	11.8	28.0	15.3	32.6	11.7	27.9	9.4	29.3	165.9
1979 .....	11.3	27.5	15.3	36.2	10.4	28.4	12.6	31.7	173.2
1980 .....	10.0	27.4	15.1	32.8	14.1	29.9	11.3	32.4	173.1
1981 .....	11.2	27.7	14.2	32.2	10.6	33.8	11.4	31.9	173.0
1982 .....	10.6	24.3	13.6	29.7	10.0	35.8	11.8	32.6	168.4
1983 .....	11.0	25.1	10.1	29.6	11.9	32.0	12.3	34.3	166.3

(a) These figures are derived from the Labour Force Survey, and should only be used as an indication of longer term trends in employment. The ABS is planning to implement an extended survey of private employers each quarter to provide a new series of employment estimates. Further details may be found in the Information Paper (Cat. No. 6239.0) issued on 8 July 1981.

(b) Includes following industries: (i) Forestry, Fishing and Hunting; (ii) Mining; (iii) Electricity, Gas and Water; (iv) Transport and Storage; (v) Communications; (vi) Public Administration and Defence.

(c) Subject to sampling variability too high for most practical uses.

For many years the ABS produced two series of employment statistics. One series is based on the monthly Labour Force Survey; the second was based on data derived from employers' pay-roll records—mainly pay-roll tax records in the case of private employers. The former series provides estimates of total employed persons and their characteristics. The series based on pay-roll data provided estimates of wage and salary earners in civilian employment only but gave a more detailed industry break-up than available from the Labour Force Survey.

The two series differed in coverage, content, sources of information, collection methodology and estimation procedures. The pay-roll based series had a particular problem of lack of information about employment in those firms which had pay-rolls below the pay-roll tax exemption level. This was compounded by states adopting different exemption levels. The ABS had assumed that employment in these small firms changed in the same proportion as employment in the larger firms. The ABS had regarded this assumption as unsatisfactory for some time.

From late 1979 the wage and salary earners in civilian employment (civilian employees) and Labour Force series diverged considerably. The latter series grew much more rapidly than the civilian employee series. This led the ABS to review its employment statistics.

The outcome of the review was:

- (i) a finding that the civilian employee series had underestimated the rate of growth in employment in 1979-80. This resulted from under-estimation of the employment in firms below the pay-roll cut off level;
- (ii) reliable statistics of employment by sex and industry at Australia, state and territory levels were needed by users;
- (iii) the Labour Force Survey provided reliable long term indications of change in employment but the month-to-month changes in employment were not always reliable;
- (iv) a decision to discontinue the pay-roll tax based civilian employee series for the private sector;
- (v) development of a survey of employment and earnings to provide an employee series to replace the old civilian employee statistics.

#### Civilian Employees of Government Bodies

In Tasmania, as in other Australian states, a relatively high proportion of wage and salary earners is employed by government bodies operating at four levels; federal, state, local and semi-government (with the complication that semi-government authorities may have been created by either federal or state legislation). For the purpose of these statistics, government employees include persons working on government services such as railways, bus services, banks, post offices, power and light, air transport, education (including universities), radio, television, police, public works, government factories, departmental hospitals and institutions, etc., as well as those engaged in administrative services.

Estimates of private and government employment are on a revised basis which has been designed to achieve uniformity of classification with other statistical collections. The principal changes affecting the private/government dissection of employment estimates are as follows:

- (i) *Hospitals*: Non-departmental 'public' hospitals (other than those run by religious or charitable organisations) are now classified to State Government.
- (ii) *Marketing Authorities*: All marketing authorities or boards (other than those which are purely growers' or producers' co-operatives) are now included in the government sector as they exercise functions which are fundamentally those of government.

The following table shows the number of government employees in Tasmania according to the level of government:

Civilian Employees of Government Bodies, Tasmania, at 30 June ('000)				
Year and Sex	Level of government			Total
	Federal (a)	State (a)	Local	
1981—Males .....	7.3	20.2	2.6	30.2
Females .....	2.3	16.0	0.5	18.8
Persons .....	9.7	36.2	3.1	49.0
1982—Males .....	7.1	20.4	2.5	30.1
Females .....	2.4	16.4	0.5	19.3
Persons .....	9.5	36.8	3.1	49.3
1983—Males .....	7.2	20.1	2.7	30.0
Females .....	2.5	15.8	0.5	18.8
Persons .....	9.7	35.9	3.2	48.8

(a) Includes semi-government authorities.

### Department of Employment and Industrial Relations

The Department of Labour and National Service was established in 1940 to bring together employment and industrial functions which were then being undertaken by various other departments. It became the Department of Labour in 1972 but was reconstituted as the Department of Labour and Immigration in 1974 to incorporate the immigration function. The Department was renamed Employment and Industrial Relations in 1975 when the responsibility for immigration was transferred to the new Department of Immigration and Ethnic Affairs.

The Department was divided in 1978 into a Department of Industrial Relations and a Department of Employment and Youth Affairs; the Office of Youth Affairs was, at that time, transferred to Employment and Youth Affairs from the former Department of Environment, Housing and Community Development. In 1982 the two departments were reunited to form the Department of Employment and Industrial Relations.

#### *Industrial Relations*

The Industrial Relations Division of the Department is responsible for the continuous review and evaluation of the social and economic effects and implications of industrial relations developments in Australia and overseas, for formulation of policy advice to Government on effective industrial relations, and the co-ordination and implementation of Government industrial relations policy.

Through its Working Environment Branch the Division also seeks to encourage and help organisations to:

- (i) improve their productivity by more efficient use of their human resources;
- (ii) improve the quality of work life and job satisfaction of employees through the application of personnel and participative systems.

*Local Trades Committee:* For persons who have not completed an Australian apprenticeship, national recognition as a tradesman in the metal, electrical and footwear trades may be obtained by way of a Tradesmen's Certificate issued under the *Tradesmen's Rights Regulations Act 1946*.

In brief, the Tradesmen's Certificate may be issued by the Local Trades Committee to:

- (i) settlers from overseas suitably qualified by specific overseas trade training and/or employment experience;
- (ii) suitably experienced people who have learned the skills of the trade informally on the job;
- (iii) ex-servicemen who have completed specific trade training other than apprenticeship while serving in the Australian defence forces.

#### *Arbitration Inspectorate*

The Arbitration Inspectorate is responsible for securing the observance of the *Conciliation and Arbitration Act* and Regulations and of Federal awards and agreements.

Up until 30 June 1983 this function was carried out by the Industrial Relations Bureau which was a statutory authority. The Industrial Relations Bureau was abolished as from that date and as from 1 July 1983 the Arbitration Inspectorate was created in the Department of Employment and Industrial Relations.

The Arbitration Inspectorate conducts inspections at employers workplaces where those employers are bound to Federal awards and agreements to ensure compliance with those awards and agreements. It also has a responsibility to advise employers and employees of their rights and obligations under the *Conciliation and Arbitration Act*, Regulations, Federal awards and agreements.

## Employment

The Employment Division of the Department is responsible for the formulation of national manpower policies including responsibility for the operation of the Commonwealth Employment Service (CES) under the *Commonwealth Employment Services Act 1978*.

### The Commonwealth Employment Service

The Commonwealth Employment Service (CES) was originally established by federal legislation under Section 47 of the *Re-Establishment and Employment Act 1945* and under the *Social Services Legislation Declaratory Act 1947*. In August 1978 a new *Commonwealth Employment Service Act* was passed providing for a National Director and State Directors of the CES and national, state and local committees, with an advisory role comprising a range of representatives from the community.

The functions of the CES are:

- (i) To assist persons seeking employment or a change in employment to obtain suitable positions having regard to their experience, training or qualifications, and to the economic and other needs of the Australian community. In particular to: (a) provide persons with information relating to employment, such as advice about qualifications for occupations and vocational guidance; and (b) make special arrangements and facilities to assist immigrants, Aborigines, the young, the handicapped, school leavers and those with professional or technical qualifications or those who have special requirements or disadvantages in relation to employment.
- (ii) To assist employers to fill vacant positions with available persons who are suitable for the performance of the duties and who meet employers' requirements for the positions.
- (iii) To promote and implement manpower programs and other measures designed to ensure a high level of employment.
- (iv) To register persons who are unemployed and who wish to claim unemployment benefits under the *Social Services Act 1947* and provide help in seeking employment for persons claiming or receiving such benefits. It is possible for a person to register as unemployed but make no claim for unemployment benefit.

The next table gives details of persons receiving unemployment benefit each month for recent years:

Number of Persons Receiving Unemployment Benefit, Tasmania (a)

Month	1977	1978	1979	1980	1981	1982	1983
January .....	7 397	9 244	11 244	11 621	12 310	15 505	20 385
February .....	7 501	9 577	11 876	11 849	12 910	16 127	21 770
March .....	6 926	8 785	11 028	11 143	12 169	15 202	20 594
April .....	6 575	9 119	9 975	10 421	12 112	15 196	19 904
May .....	6 554	9 383	10 104	10 651	12 414	15 643	20 040
June .....	7 078	9 757	10 420	11 121	12 929	16 263	20 355
July .....	7 978	9 770	9 922	10 902	13 175	16 977	20 478
August .....	7 917	9 935	10 257	10 750	13 893	17 714	20 240
September .....	8 083	10 206	10 503	10 770	15 137	18 781	20 207
October .....	8 037	9 812	10 203	10 921	13 663	18 950	19 600
November .....	7 179	9 639	9 882	10 722	13 238	18 570	19 507
December .....	7 610	9 508	10 180	10 753	13 396	19 803	20 063

(a) Compiled from information furnished by the Department of Social Security. Monthly figures may not be directly comparable in all cases because of changes in the definition of unemployment and of variations in compilation procedures.

continued next page

### Manpower Training Programs

The Department is charged with the role of developing and administering employment and training schemes to give people the skills and experience they need to obtain and keep employment. These programs have the joint functions of helping to overcome identified shortages of skills in the labour market and assisting in the long term restructuring of the work force. Programs include:

#### *Youth Training*

(i) *Participation and Equity Programme (PEP)*: The Department is closely involved with the State and Commonwealth Education Departments in the administration of this scheme which provides courses at Technical and Further Education (TAFE) Colleges for young people who need further education or skill training before they can obtain employment. The courses are vocationally oriented and range from pre-apprenticeship courses to basic literacy, numeracy and life skills training. Trainees attending these courses are paid special allowances.

(ii) *The Special Youth Employment Training Program (SYETP)*: The CES pays employers a subsidy to employ and train young people aged 15 to 24 who have been unemployed for at least four months. Higher subsidies are paid for young people aged 18 to 24 who have been unemployed for eight months or more.

(iii) *Adult Wage Subsidy Scheme* was introduced in March 1983 with the objective of providing a period of stable employment for unemployed adults. Employers are paid a wage subsidy to provide 34 weeks continuous employment to persons over 25 years who have been unemployed for at least eight of the previous 12 months. Higher subsidies are paid for a 12 month period to employers who employ adults over 45 years who have been unemployed for at least 12 months.

#### *Special Training*

(i) *Disabled Persons*: Under these programs disabled people may receive allowances to attend formal courses. Employers may receive subsidies for offering disabled persons on-the-job training. The subsidies are higher than those available to other groups because of the particular difficulties faced by disabled persons.

(ii) *Aboriginals*: A national employment strategy has been developed to provide training and employment for Aboriginals. As well as training in the public sector, private employers are paid subsidies to employ Aboriginals who receive on-the-job training.

(iii) *Special Needs Job Seekers*: Persons assessed as having difficulty in finding or keeping employment because of social, cultural or other personal factors may receive assistance in the form of subsidised on-the-job training for a period twice that normally provided for a given occupation.

#### *Skills Training*

(i) *General Training Assistance*: Assistance for individuals is provided by way of training allowances while undertaking formal courses and subsidies to employers to provide on-the-job training.

(ii) *Skills in demand*: Assistance is available under this program:

- to provide assistance to industry to establish new or improved training arrangements, particularly those of a nationally consistent nature;
- to provide assistance to industry to overcome skill shortages;
- to assist unemployed persons with training to enable them to obtain stable employment.

Funding is provided where there is a current or anticipated industry shortage in a particular locality and/or the need established for a new training arrangement where none previously existed.

In the selection of trainees:

- there should be joint industry/Government development of selection criteria;

- the Commonwealth Employment Service (CES) will ascertain whether there are unemployed people who meet the selection criteria;
- the selection panel for trainees will comprise industry representatives and Department of Employment and Industrial Relations.

(iii) *Industry Training Services*: This program is designed to aid and stimulate the systematic training programs through all sectors of industry and commerce. The program funds the operation of the National Training Council and the Industry Training Committees. The aim is to use training to promote efficiency, productivity and safety as well as industry's capacity to cope with new equipment, new techniques and changes in processing and market requirements.

Industry Training Committees are established in Tasmania in the following industries: building and construction, dairy, fishing, local government, printing, retail food, motor, timber, tourism, rural and textile, clothing and footwear.

### *Trade Training*

The Commonwealth encourages employers to indenture and train apprentices. The Commonwealth Rebate for Apprentice Full-Time Training (CRAFT) provides employers with an incentive to increase the number of apprentices they employ and to improve the quality of training. Under the CRAFT scheme tax exempt rebates are paid to employers for each day an apprentice is released from work to undertake formal training. An allowance is payable to some apprentices who have to live away from home during their apprenticeship.

*Special Apprentice Training Schemes*: In addition to CRAFT, special arrangements under a variety of schemes can be made to encourage improvement in the quantity and quality of apprentice training.

### **Community Youth Support Scheme**

The Community Youth Support Scheme (CYSS) is a Federal Government scheme which was introduced in October 1976 as a means of encouraging local community groups to become involved in assisting unemployed young people. The scheme, which is the first of its kind, recognises that young people experiencing periods of unemployment at a time when there is a shortage of jobs may need support or assistance.

The form in which this support may be offered varies according to the particular needs of the young people concerned. Organisations and groups within the community are encouraged to seek funding to run programs and services for young unemployed people. The scheme is designed to complement other Government initiatives previously introduced to increase employment and training opportunities for young people. Accordingly, CYSS programs must contain some orientation towards employment. This need only be in fairly general terms. It is not intended that CYSS should provide formal skills training as this may be dealt with under Manpower Training Schemes.

CYSS is not a job creation program, nor is it a means of getting jobs done for organisations which need free labour. CYSS may help young people in several ways:

- (i) by better equipping them to get a job. Sessions on how to handle job interviews, how to go about applying for a job and even where to look for jobs will give a young person confidence and a better chance of finding employment;
- (ii) by giving assistance with social, financial, educational, health and general welfare problems that could be making it more difficult for them to find employment;
- (iii) by providing a wide range of activities to make the period of unemployment more interesting and more creative. Because of the shortage of job vacancies some young people may face long periods of unemployment. They may become bored, frustrated and disillusioned. CYSS funds may be used to provide outdoor activity, art and craft workshops, sessions on basic car maintenance, cookery, etc.



Any young person registered with the Commonwealth Employment Service is eligible to participate in CYSS projects. There are 22 CYSS groups throughout the State.

### **Community Employment Program**

The Community Employment Program (CEP) is a major initiative of the Commonwealth Government to create employment opportunities.

The Program operates under the *Community Employment Act* of 1983 and involves the Commonwealth and State Governments in a constructive partnership with local government authorities and community organisations.

Commencing on 1 August 1983 the Program is to be funded for a period of three years. When fully operational it is designed to create 70 000 jobs on worthwhile community projects.

A total of \$300 million for 1983-84 has been made available for CEP, of which \$250 million is being distributed to the states and territories principally on a population basis. From the \$250 million, special allocations have been made in 1983-84 for local roads and country water resources projects.

\$50 million of the \$300 million for the Program will be provided for job creation projects managed by Commonwealth departments and authorities. This Commonwealth component of CEP will be subject to separate administrative arrangements.

#### *Objective*

The objective of CEP is to create additional employment opportunities for unemployed persons through the funding of labour intensive projects of social and economic benefit to the community.

#### *Features*

CEP is to be directed at those unemployed persons who are particularly disadvantaged in the labour market and who are consequently least likely to benefit from improved economic activity; particularly the longer term unemployed and those suffering from social and other disadvantages.

Equal access is to be provided for men and women to employment opportunities; in some instances, this may necessitate special measures to ensure that women receive an equal share of the jobs created (funds earmarked for roads expenditure would be excluded).

Positions under CEP should provide persons with work experience and/or training which will assist participants in gaining on-going employment.

Projects should lead to the provision of facilities and services of public and community benefit.

Priority consideration will be given to projects in areas of high unemployment.

#### *The Consultative Committee*

All applications for CEP grants are considered on their merits by a Consultative Committee in the State. The Committees comprise Commonwealth and State Government officials and representative(s) of local government, non-government organisations and interest groups. The Committees have the functions of encouraging and facilitating the development of worthwhile projects in the State and ensuring that the targets and objectives of the Program are met.

#### *The Secretariat*

Each Consultative Committee is serviced by a joint Commonwealth and State Secretariat. The Secretariat is responsible for receiving applications for CEP grants and ensuring that each application meets the guidelines and has provided sufficient information for consideration by the Consultative Committee. It also assists the Committee in its





*Flinders Island*

*(Tasmanian Government Stills Photographic Section)*





*Flinders Island*



*(Tasmanian Government Stills Photographic Section)*

*Grazing land, Flinders Island*





developmental role by co-ordinating the provision of relevant information on individual projects and characteristics of the labour market in their respective states.

### **Tasmanian Committee on Discrimination in Employment**

On 15 June 1973, the Australian Government ratified Convention No 111 of the International Labour Organisation—Discrimination (Employment and Occupation) 1958. Over 80 countries throughout the world have now ratified this important human rights convention.

For the purposes of the Convention the term 'discrimination' includes "... any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation".

In a move unique among the signatory countries to the Convention, Australia established Committees on Discrimination in Employment and Occupation to act as operational bodies in promoting the ideal of equal opportunity in the work force. The Committee has a tripartite structure, with representatives of both Australian and State Governments, of employers and employees. They are presided over by an independent chairman. The Tasmanian Committee is part of the Australia-wide machinery.

The Committee's chief aim is to enlist community support, through a nation-wide education and publicity campaign, in the promotion and acceptance of a policy of non-discrimination. Discrimination in employment is an anti-social activity which militates against the basic principles of human rights.

The Tasmanian Committee investigates complaints of discrimination from members of the public. Most of the cases dealt with so far have been complaints on sex grounds and on the basis of race or nationality. Complaints are followed up with the employer concerned, and a feature of the Committee's work has been the co-operation and support it has received from most employers.

The Committee also deals with complaints of sexual harassment in employment, and discrimination on the grounds of age, marital status, criminal record, disability, sexual preference, nationality and other grounds.

The Tasmanian Committee has been heartened by the progress which has been made in efforts to eliminate discrimination in the work force. Since it began operating in July 1973 it has seen increasing awareness by employers, employees and members of the public, of the problems of discrimination and, more importantly, of positive measures which can be taken to overcome those problems.

The Committee's role is primarily educative and conciliatory. It has no statutory powers and should not in any way be regarded as a punitive body.

The Attorney General's Department took over responsibility for the Committees in January 1984 from Employment and Industrial Relations. This was to reduce duplication between Departments and simplify complaint handling as the Commonwealth Government introduces and amends human rights legislation.

## **INDUSTRIAL LEGISLATION AND CONDITIONS**

### **Apprenticeship**

#### *Apprenticeship Commission*

The Apprenticeship Commission was set up under the *Apprentices Act* 1942 to: (i) encourage, regulate and control training in proclaimed trades; (ii) assist youths towards successful trade courses; and (iii) provide properly trained craftsmen for industry. The Commission, which meets each month, consists of three representatives of trade unions, three of employers' organisations, a nominee of the Minister for Education and

the President, all members being appointed for a three-year term. To keep the Commission up-to-date with the latest developments, Trade Committees have been formed for particular industries, with both employers and employees represented.

Apprentices are trained at work and at technical classes, and supervisors report on the effectiveness of the training; supervisors also give on-the-spot advice to employers and apprentices where their mutual obligations are concerned and refer matters that cannot be settled in this way to the Commission for decision.

#### *Apprenticeships*

An apprenticeship may not be commenced without prior application to the Commission which determines the suitability of employers for training apprentices and the educational qualifications required for entry to a particular trade.

The apprentice serves a three month probationary period before a contract (indenture) is made and formally signed by the employer, parent/guardian, and apprentice, prior to being registered with the Commission. The Commission determines disputes arising between the indentured parties' rights and duties; no apprenticeship may be terminated, suspended or assigned other than by its authority. When an apprenticeship has been completed, the employer and the Commission certify the original indenture to this effect. Where apprentices are required to undertake technical training such instruction is mandatory. Apprentices who attend technical classes during working hours do so without loss of pay. (Country apprentices in remote areas attend Block Release Training, usually three fortnightly training periods each year.) The progress of apprentices at Technical colleges is reported to the employer, parent/guardian, and the Commission where unsatisfactory reports are investigated. An annual training progress and attendance report is also required to be submitted to the Commission by the employer.

Apprentices are encouraged in the following ways: (i) by payment of *proficiency allowances* for annual examinations passed successfully in the allotted time; (ii) by *certificates of proficiency* for apprentices successfully completing the mandatory trade course of technical instruction; (iii) by reducing the apprenticeship term by one year in some cases, where the qualifying trade course is completed in the allotted time; and (iv) by the award of bursaries.

The Commission offers an Award of \$250 and a Bronze Medallion to the outstanding apprentice in each of eleven trade groups. The 'Apprentice of the Year' who qualifies for an award of \$600 is selected from the winners. Should there not be an outstanding apprentice in any particular trade group, the prize money allotted for that trade group may be awarded to those apprentices who receive Commendations.

#### *Number of Apprentices*

The following table shows the number of apprentices in Tasmania and also details of apprenticeships registered and completed:

Number of Apprentices, Apprenticeships Registered and Completed, Tasmania						
<i>Particulars</i>	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Number at 30 June (a)—						
Indentured apprentices .....	4 424	4 445	4 465	4 466	4 177	3 647
Apprentices on probation .....	320	330	296	332	203	179
Total .....	4 744	4 775	4 761	4 798	4 380	3 826
During year—						
New apprenticeships registered .....	1 271	1 278	1 379	1 362	1 074	761
Apprenticeships completed .....	1 077	1 007	1 140	1 190	1 083	1 091

(a) Distributed in proclaimed trades.

## Industrial Safety and Accident Prevention

### General

**Responsibility:** The Department of Labour and Industry administers legislation relating to safety, health and welfare in work places generally (but excluding work places subject to the *Mines Inspection Act* 1968 which prescribes safety standards for mines and mining works and is administered by the Mines Department). The Department's Technical Services Division inspectorate performs inspection and advisory functions throughout the State.

**Prevention:** Prevention obviously has a two-fold aspect: (i) inspection programs aimed at pin-pointing unsafe working conditions; and (ii) education and training designed to eliminate unsafe actions.

**Training:** The Department endeavours to develop an attitude of 'safety consciousness' among employees and employers. This is the primary aim of general safety training. More specific training is basically aimed at educating supervisors and foremen, since an attitude of 'safety consciousness' must involve management. Formal training in industrial safety and accident prevention is available at Hobart and Launceston Technical Colleges in two year courses. Informal training is arranged by the Department of Labour and Industry, the two-day courses being based on the concept of 'training within industry'. Single sessions on industrial, farm and forest safety are also available and the Department makes arrangements to provide instructors on request.

**Safety Officers:** It is expected that large undertakings will have their own specialists concerned with safety matters. However, government safety officers are available to industries which may use their services for short periods. Their function is purely advisory and they assist organisations which wish to stress safety or to reduce their accident rates.

### Legislation

*The Industrial Safety, Health and Welfare Act* 1977 deals with physical working conditions generally and applies to all premises or places where people work (excepting mines and mining works which are subject to comparable standards imposed under the *Mines Inspection Act* 1968). In addition to general working standards set down in the Act and associated regulations, requirements for the use of boilers, other pressure vessels and lifting machinery are specifically prescribed. These regulations also cover work in the building and construction industry and the rural and forest industries.

### Industrial Accidents

Industrial accident statistics in Tasmania are compiled from reports of workers' compensation claims submitted by insurance companies and some self-insurers. From 1977-78 the returns have been submitted by insurers to cover the number of accidents that occurred during a financial year. Previously, returns were collected for cases finalised during a financial year.

The collection is limited to those employees covered by the Tasmanian *Workers' Compensation Act* and therefore excludes self-employed persons, Federal Government employees and the police. Exclusion of self-employed persons is likely to reduce coverage in industries where self-employment is prevalent (e.g. retail trade, rural industries, etc.). Because of the exclusion of Federal Government employees, some industries are not covered at all, while coverage is considerably reduced in other industries (e.g. communications).

In compiling the statistics the following definitions have been adopted:

**Industrial Accident:** A compensatable claim under the *Workers' Compensation Act* 1927 that arises out of a work related event and leads to a loss of time of one day (shift) or more, permanent total incapacity or death.

**Time Lost:** The actual time lost from work of persons reported to be temporarily incapacitated or permanently partially-incapacitated as a result of a compensated work injury.

*Cost of Claims:* Includes compensation for wages lost, hospital and medical expenses and lump sum settlements of cases finalised during the year ended 30 June. Insurers are asked to estimate the cost of claims not finalised by 31 October of the following financial year.

*Industry Groups:* Classified in accordance with the Australian Standard Industrial Classification.

The table that follows shows the number of industrial accidents reported during 1981-82 by the extent of disability:

**Industrial Accidents: Industry Group and Extent of Disability, Tasmania, 1981-82**

Industry Group	Extent of Disability				Total number of accidents
	Temporary	Permanent partial	Permanent total	Death	
Agriculture, forestry, fishing and hunting ..	729	3	1	—	733
Mining .....	1 259	27	3	3	1 292
Manufacturing—					
Food, beverages and tobacco .....	649	5	—	—	654
Wood, wood products and furniture .....	838	3	—	1	842
Non-metallic mineral products .....	83	—	1	—	84
Basic metal products and fabricated metal products .....	1 166	3	1	—	1 170
Transport equipment .....	169	1	1	—	171
Miscellaneous .....	771	8	—	4	783
Electricity, gas and water .....	717	5	1	1	724
Construction .....	1 330	7	10	2	1 349
Wholesale and retail trade .....	1 157	5	2	1	1 165
Transport, storage and communication .....	499	7	1	—	507
Finance, property and business services .....	135	—	—	1	136
Public administration and defence .....	175	2	1	—	178
Community services .....	1 032	4	7	—	1 043
Recreation, personal and other services .....	365	1	2	—	368
<b>Total .....</b>	<b>11 074</b>	<b>81</b>	<b>31</b>	<b>13</b>	<b>11 199</b>

The time lost and cost of claims arising out of industrial accidents, as applicable to each industry group, is shown in the next table:

**Industrial Accidents: Industry Group, Time Lost and Cost of Claims, Tasmania, 1981-82**

Industry group	Time lost (a)		Cost of claims		
	Duration of leave (Days)	Average leave (Days)	Non-fatal accidents (\$)	Fatal accidents (\$)	Average per non-fatal accident (\$)
Agriculture, forestry, fishing and hunting ..	12 662	17	711 709	—	971
Mining .....	17 596	14	2 269 220	349 730	1 760
Manufacturing—					
Food, beverages and tobacco .....	8 483	13	450 377	—	689
Wood, wood products and furniture .....	14 672	17	1 018 138	48 372	1 211
Non-metallic mineral products .....	1 858	22	154 906	—	1 844
Basic metal products and fabricated metal products .....	14 083	12	969 386	—	829
Transport equipment .....	4 659	27	320 033	—	1 872
Miscellaneous .....	12 643	16	795 879	49 030	1 022
Electricity, gas and water .....	13 393	19	898 967	100 000	1 243
Construction .....	21 776	16	1 718 993	151 364	1 276
Wholesale and retail trade .....	16 029	14	1 026 869	25 000	882
Transport, storage and communication .....	9 574	19	558 346	—	1 101

**Industrial Accidents: Industry Group, Time Lost and Cost of Claims, Tasmania, 1981-82—continued**

Industry group	Time lost (a)		Cost of claims		
	Duration of leave (Days)	Average leave (Days)	Non-fatal accidents (\$)	Fatal accidents (\$)	Average per non-fatal accident (\$)
Finance, property and business services .....	2 458	18	167 211	20 000	1 239
Public administration and defence .....	4 020	23	272 955	—	1 533
Community services .....	22 626	22	1 533 515	—	1 470
Recreation, personal and other services .....	9 665	26	478 667	—	1 301
Total .....	186 197	17	13 345 171	743 496	1 193

(a) Temporary and permanent partial disability cases only.

### Workers' Compensation

**Legislation:** Workers' compensation legislation in Tasmania was first introduced in 1910 but it was not until 1927 that the principle of compulsory insurance was embodied in the *Workers' Compensation Act 1927*.

**Purpose and Limitations:** The principle of the Act is provision for compensation on the death or disablement of a worker, if occasioned by personal injury arising out of and during the course of employment and while travelling in either direction between his residence and place of employment. The Act provides that this cover to and from work applies only for reasonably direct journeys, except for breaks or deviations connected with the worker's employment. Coverage is also provided for workers who are temporarily absent from work during meal breaks. Self-inflicted injuries are excluded and certain limitations are applied where serious or wilful misconduct is involved. Monetary benefits have fixed limits. All reasonable costs of medical, hospital, nursing and ambulance services and in the event of death, the reasonable costs of burial or cremation are paid. In addition, weekly payments are made during periods of incapacity and there is provision for a lump sum entitlement for specified injuries included in a schedule to the Act.

**Non-contributory Basis:** The Act is non-contributory, i.e. the worker does not pay into any fund for the provision of benefits. The employer is obliged to insure with an approved insurance company against the liability to compensation, except in certain cases where he is allowed to carry his own risk. In any case where an employer has no paid-up insurance policy, where the employer cannot be found or where the employer or his insurance company has become insolvent, the worker may claim against a 'nominal insurer', as if he were the employer. Amounts paid by the 'nominal insurer' are provided by all insurance companies carrying on workers' compensation business. Each company is required to contribute to these types of claims in proportion to the premium income derived from policies issued during the preceding year.

**Compensation on Death:** Where death results from an injury, the compensation payable to dependants wholly dependent on the worker's earnings is 284 times the current Hobart basic rate, plus seven times the current Hobart basic rate for each worker's child under sixteen years at the date of injury. Partial dependants are entitled to proportionate amounts.

**Basic Rate** means the minimum weekly wage payable to the lowest paid adult male employed at Hobart under the federal Metal Trades Award (in January 1984 the rate was \$201.80 per week).

**Weekly Payments During Incapacity:** When the worker is *totally incapacitated* he is entitled to receive weekly compensation payments at whichever of the following alternatives is greater: (i) the rate of his average weekly earnings over the period of 12 months immediately preceding the period of incapacity; or (ii) the ordinary time rate of



pay for the work on which he was engaged immediately prior to the period of incapacity. When the worker is *partially incapacitated* the weekly payments are reduced by any amount that he is able to earn in some other suitable employment.

**Maximum Limit of Weekly Payments:** In cases of partial or total incapacity of any worker, the total liability of an employer in making weekly compensation payments is limited to 284 times the current Hobart basic rate.

**Lump Sum Payments:** In addition to weekly incapacity payments, lump sum payments are made in respect of the loss of members of the body or of bodily powers of function. In the Act, specific injuries are listed and the single amount payable is related to the current Hobart basic rate (specified as B in the following examples): (i) loss of both feet,  $B \times 284$ ; (ii) loss of leg,  $B \times 138$ ; (iii) loss of thumb,  $B \times 51$ ; and (iv) loss of great toe,  $B \times 35$ , etc. Where more than one of these injuries are suffered in the same accident, a maximum payment equal to  $B \times 532$  may be paid.

### Long Service Leave

The *Long Service Leave Act 1976* provides for the granting of 13 weeks long service leave to all employees who complete 15 years continuous service with one employer. A pro-rata entitlement applies in respect of termination of employment after less than 7 years service in certain circumstances.

Contributions to a Long Service Leave (Construction Industry) Fund, (formerly Long Service Leave (Casual Employment) Fund) are made by employers with respect to all casual employees covered by the Act. For further details, reference should be made to the 1977 or earlier editions of the *Year Book*.

### Trade Unions

The following table shows details of the number of unions and the number of union members in Tasmania:

Trade Unions: Numbers and Membership, Tasmania

Year ended 31 December	Number of separate unions	Number of members (‘000)	Annual increase in membership (percent) (a)	Year ended 31 December	Number of separate unions	Number of members (‘000)	Annual increase in membership (percent) (a)
1971 .....	115	75.9	2.4	1977 .....	122	90.2	5.5
1972 .....	112	81.0	6.7	1978 .....	123	88.9	- 1.4
1973 .....	118	84.0	3.7	1979 .....	121	88.2	r - 0.8
1974 .....	123	89.0	6.0	1980 .....	122	88.4	r 0.2
1975 .....	122	86.0	- 3.4	1981 .....	123	89.8	1.6
1976 .....	120	85.5	- 0.6	1982 .....	124	88.1	- 1.9

(a) Over preceding year.

### PRICES

#### Retail Prices and Price Indexes

##### Retail Price Index Numbers from 1901

Retail prices of food and groceries and average rentals of houses for periods extending back to the year 1901 were collected by the Australian Statistician. A continuous price series from 1901 to the present day (shown in part below) has been constructed from the various indexes in use during this period to provide a *broad indication* of long-term trends in retail price levels for Australia. The index numbers are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are 1901-1914, the ‘A’ Series; from 1914 to 1946-47, the ‘C’ Series; from 1946-47 to 1948-49, a composite of Consumer Price Index Housing Group (partly estimated) and ‘C’ Series excluding rent; and from 1948-49, the Consumer Price Index:

**Retail Price Index Numbers from 1901: Six State Capital Cities Combined**  
(Base: Year 1911 = 100)

Year	Index number	Percent-age change (a)	Year	Index number	Percent-age change (a)	Year	Index number	Percent-age change (a)
1901 .....	88	..	1946 .....	190	+ 1.6	1976 (c) .....	1 083	+13.5
1911 .....	100	+ 3.1	1951 .....	313	+19.5	1977 .....	1 216	+12.3
1921 (b) .....	168	-13.0	1956 .....	419	+ 6.3	1978 (c) .....	1 312	+ 7.9
1926 .....	168	+ 1.8	1961 .....	471	+ 2.6	1979 (c) .....	1 431	+ 9.1
1931 .....	145	-10.5	1966 .....	517	+ 3.0	1980 .....	1 578	+10.3
1936 .....	141	+ 2.2	1971 .....	621	+ 6.0	1981 .....	1 731	+ 9.7
1941 .....	167	+ 5.0	1974 .....	829	+15.1	1982 .....	1 923	+11.1

(a) Over previous year (previous year's figures not necessarily shown in table).

(b) November; remaining figures are averages for the respective years.

(c) Affected by changes in the financing of health services.

### Consumer Price Index

The Consumer Price Index (CPI) measures quarterly changes in the price of a constant 'basket' of goods and services which account for a high proportion of expenditures by metropolitan wage and salary households. The CPI is described as a chain of 'fixed weight aggregative' linked indexes. Significant changes in the weighting pattern have been made at approximately five-yearly intervals to take account of changes in household spending patterns. However, during each period between links the range of items included and their quantity weights remain fixed (i.e. the 'quantity' for each type of item included in the 'basket' for calculation of the CPI does not change between linking dates)—base-weighted indexes of this type are referred to as Laspeyre's indexes. The percentage contributions of items to the CPI (often described as 'value weights') change continually from quarter to quarter because of relative price movements which tend to differ from one item to another. The next table shows the percentage contributions of the various groups and sub-groups to the CPI as at the June quarter 1983:

**Consumer Price Index, Hobart, Percentage Contributions to the Total CPI (a)**

Group, Sub-group, etc.	As at June quarter 1983	
	Sub-group, etc.	Group
Food—		
Dairy produce .....	2.006	
Cereal products .....	2.081	
Meat and seafoods—Meat .....	4.748	
Fish .....	0.315	
Fruit and vegetables—Fresh fruit and vegetables .....	1.396	21.313
Processed fruit and vegetables .....	0.997	
Soft drinks, ice-cream and confectionery .....	2.813	
Meals out, take away food .....	4.924	
Other food .....	2.015	
Clothing—		
Men's and boys' clothing .....	2.947	
Women's and girls' clothing .....	3.963	
Piecegoods and other clothing .....	0.442	9.324
Footwear .....	1.501	
Clothing and footwear services .....	0.471	
Housing—		
Rent—Privately owned dwellings .....	2.548	
Government owned dwellings .....	0.383	
Home ownership—Local government rates and charges .....	1.657	11.753
Other home ownership .....	7.165	

## Consumer Price Index, Hobart, Percentage Contributions to the Total CPI (a)—continued

Group, Sub-group, etc.	As at June quarter 1983	
	Sub-group, etc.	Group
Household equipment and operation—		
Fuel and light .....	2.825	
Furniture and floor coverings .....	2.487	
Appliances .....	1.060	
Drapery .....	1.035	13.227
Household utensils and tools .....	1.385	
Household supplies and services .....	3.216	
Postal and telephone services .....	1.219	
Transportation—		
Private transport—Motor vehicle purchase .....	4.160	
Automotive fuel .....	4.973	15.464
Other motoring costs .....	5.467	
Urban transport fares .....	0.864	
Tobacco and alcohol—		
Alcoholic beverages—Beer .....	4.698	
Wine and spirits .....	1.475	
	8.870	
Cigarettes and tobacco .....	2.697	
Health and personal care—		
Health services .....	5.541	
Personal care products .....	1.957	8.299
Personal care services .....	0.801	
Recreation and education—		
Books, newspapers, magazines .....	1.408	
Other recreation goods .....	2.179	
Holiday, travel and accommodation .....	5.225	11.750
Other recreation services .....	1.854	
Education and child care .....	1.084	
Total All Groups .....	100.000	100.000

(a) Percentage contributions shown are based on estimates of household expenditure for the year 1979-80, valued at June quarter 1983 prices.

*Comparison of the Linked Series:* The Consumer Price Index is a chain of 'fixed weight aggregative' indexes, with significant changes in composition and weighting made at the linking dates.

The 1977 *Year Book* includes details relating to changes made at the following linking dates: June quarter 1952; June quarter 1956; March quarter 1960; December quarter 1963; December quarter 1968; and December quarter 1973. Subsequent changes were as follows:

*The Eighth Linked Series* was introduced from the September quarter 1974 when the item 'Radio and television licences' was deleted. This series comprised the following groups and weighting pattern (percentage contributions to the total index as at the September quarter 1974): 'Food group', 26.0; 'Clothing and drapery group', 13.2; 'Housing group', 15.6; 'Household supplies and equipment group', 11.2; and 'Miscellaneous group', 34.0 per cent (all groups, 100.0 per cent).

*The Ninth Linked Series* was introduced from the September quarter 1976 and involved changed quantity weights for all items. The weights were based on spending patterns of households in the capital city statistical divisions estimated from the results of the 1974-75 Household Expenditure Survey. A new group and sub-group structure, more consistent with international convention, was adopted. Further detail relating to this series is available in the 1982 *Year Book*.

The Tenth Linked Series was introduced in the June 1982 quarterly publication and incorporated a major review of the CPI. The main changes incorporated in the tenth series were:

- (i) the reference period of the CPI was changed to 1980-81 = 100.0;
- (ii) new areas of expenditure were included in the regimen of the index:
  - (a) holiday travel and accommodation overseas,
  - (b) education fees,
  - (c) child care fees and
  - (d) pharmaceutical prescriptions;
- (iii) the timing and frequency of price collections was changed;
- (iv) the weighting pattern of the index was revised to reflect, in general, estimated household expenditure in 1979-80. A more detailed description of the CPI is available in the ABS booklet titled *A Guide to the Consumer Price Index* (Cat. No. 6440.0).

#### Consumer Price Index, Hobart

The Consumer Price Index for Hobart is compiled to base 1980-81 = 100.0, the number 100.0 being the base value for each of the major groups and also for the 'All groups' index (except for 'Recreation and education', base: March quarter 1982 = 100.0).

The following table shows group index numbers for Hobart on a financial year and quarterly basis (an annual index number is the average of the four respective quarterly index numbers):

Consumer Price Index: Hobart (a) (Base of Each Index: Year 1980-81 = 100.0) (b)									
Year or quarter	Food	Clothing	Housing	Household equipment and operation	Transportation	Tobacco and alcohol	Health and personal care	Recreation and education (d)	All groups
1977-78 .....	71.7	80.4	84.0	76.8	75.1	74.7	85.8	n.a.	74.1
1978-79 (c) ..	80.3	86.7	88.3	82.4	79.7	86.4	82.9	n.a.	79.9
1979-80 (c) ..	91.6	93.1	93.3	89.8	90.6	93.1	90.7	n.a.	88.1
1980-81 .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	n.a.	100.0
1981-82 .....	108.7	106.4	107.4	110.0	112.8	109.1	120.5	n.a.	110.0
1982-83 .....	118.6	112.8	116.3	121.7	126.8	124.0	143.0	109.4	121.8
1982—									
March .....	108.9	106.5	108.1	112.4	114.1	109.9	126.3	100.0	111.3
June .....	110.8	109.1	111.0	114.2	116.4	111.6	127.6	101.7	113.4
September ..	114.5	110.3	112.5	116.5	121.9	118.0	134.4	103.5	116.9
December ...	117.5	111.9	116.6	119.9	125.2	124.3	144.2	107.8	121.0
1983—									
March .....	118.7	112.7	117.5	123.9	129.7	126.0	146.2	112.6	123.5
June .....	123.7	116.2	118.6	126.6	130.4	127.5	147.1	113.7	125.9
Percentage Change: June Quarter 1983 over June Quarter 1982									
	+ 11.6	+ 6.5	+ 6.8	+ 10.9	+ 12.0	+ 14.2	+ 15.3	+ 11.8	+ 11.0

(a) Figures after the decimal point have limited significance; they are inserted to avoid the distortions that would occur in rounding.

(b) Except 'Recreation and education'. (March quarter 1982 = 100.0).

(c) The 'Health and personal care' and 'All groups' indexes were affected by changes in the financing of health services.

(d) There are significant differences in the composition of the old 'Recreation' group and the new 'Recreation and education' group. Therefore these two series have not been linked at March quarter 1982.

The following table shows the 'All groups' index number for Hobart, quarter by quarter, and also as averages for financial years:

**Consumer Price Index: All Groups Index Numbers, Hobart (a)**  
(Base of Index: Year 1980-81 = 100.0)

Year	Quarter ending—				Average for year	
	September	December	March	June	Index	Percentage change (b)
1977-78 .....	74.8	76.8	77.7	79.2	77.1	+ 9.8
1978-79 (c) ..	80.4	82.1	83.9	86.1	83.1	+ 7.8
1979-80 (c) ..	88.2	90.7	92.6	94.8	91.6	+ 10.2
1980-81 .....	97.0	98.7	101.0	103.2	100.0	+ 9.2
1981-82 .....	105.7	109.7	111.3	113.4	110.0	+ 10.0
1982-83 .....	116.9	121.0	123.5	125.9	121.8	+ 10.7

(a) Figures after decimal point have limited significance. They are inserted to avoid the distortions that would occur in rounding.

(b) Over preceding year. (c) See footnote (c) to the previous table.

### Consumer Price Indexes: Capital Cities

*Six Capital Cities:* A consumer price index series is constructed for each state capital city. These indexes measure price movements in each city individually (but do not provide a basis for the comparison of the retail price level in one city with that in any other city). The six capital cities Consumer Price Index is derived as the weighted average of the indexes for the individual cities, the basis of weighting being their populations as recorded at successive censuses.

The next table summarises index numbers and percentage changes for the 'All groups' Consumer Price Index for the six capital cities combined:

**Consumer Price Index: All Groups**  
**Australia—Six State Capital Cities (a): Summary**  
(Base of Index: Year 1980-81 = 100.0)

Quarter	Quarter		Percentage change from same quarter of preceding year	Calendar year (b)		Fiscal year (b)	
	Index number	Percentage change (c)		Index number	Percentage change (c)	Index number	Percentage change (c)
1980—							
December .....	98.8	+ 2.1	+ 9.3				
1981—						100.0	+ 9.4
March .....	101.1	+ 2.3	+ 9.4			(1980-81)	
June .....	103.4	+ 2.3	+ 8.8	105.0	+ 9.6		
September .....	105.5	+ 2.0	+ 9.0	(1981)			
December .....	109.9	+ 4.2	+ 11.2				
1982—							
March .....	111.8	+ 1.7	+ 10.6			110.4	+ 10.4
June .....	114.5	+ 2.4	+ 10.7	116.7	+ 11.1	(1981-82)	
September .....	118.5	+ 3.5	+ 12.3	(1982)			
December .....	121.9	+ 2.9	+ 10.9				
1983—							
March .....	124.6	+ 2.2	+ 11.4			123.1	+ 11.5
June .....	127.3	+ 2.2	+ 11.2			(1982-83)	

(a) Weighted average of six state capital cities combined.

(b) Calendar year and fiscal year index numbers are averages of the four respective quarterly index numbers.

(c) Over preceding period (year or quarter).

The next table includes details for the 'All groups excluding hospital and medical services' index. This facilitates the analysis of trends in retail prices by excluding the effects of the unusual changes in hospital and medical services for the September and December quarters of 1975 (following the introduction of Medibank), for the December quarter 1976 (following changes to Medibank), and for the December quarters of 1978 and 1979 (following changes in the financing of health services).

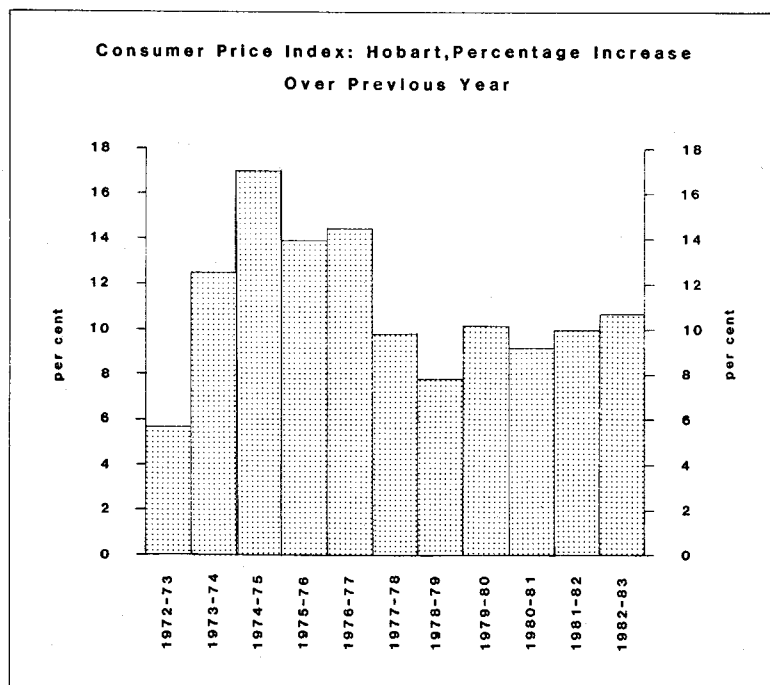
Consumer Price Index, Six State Capital Cities, Australia (a)  
All Groups and All Groups Excluding Hospital and Medical Services

Quarter	Index number	All groups			Index number	All groups excluding hospital and medical services		
		Per-centage increase over preceding quarter	Equiv-alent annual rate (b)	Per-centage increase over same quarter of previous year		Per-centage increase over preceding quarter	Equiv-alent annual rate (b)	Per-centage increase over same quarter of previous year
1979—								
March .....	83.6	1.7	7.0	(c) 8.2	83.8	1.7	7.0	9.5
June .....	85.8	2.6	10.8	(c) 8.9	86.1	2.7	11.2	10.5
September ..	87.8	2.3	9.5	(c) 9.2	88.1	2.3	9.5	11.0
December ...	(c) 90.4	(c) 3.0	(c) 12.6	(c) 10.0	90.2	2.4	10.0	9.5
1980—								
March .....	92.4	2.2	9.1	(c) 10.5	92.2	2.2	9.1	10.0
June .....	95.0	2.8	11.7	(c) 10.7	94.9	2.9	12.1	10.2
September ..	96.8	1.9	7.8	10.3	96.7	1.9	7.8	9.8
December ...	98.8	2.1	8.7	9.3	98.8	2.2	9.1	9.5
1981—								
March .....	101.1	2.3	9.5	9.4	101.2	2.4	10.0	9.8
June .....	103.4	2.3	9.5	8.8	103.4	2.2	9.1	9.0
September ..	105.5	2.0	8.2	9.0	105.7	2.2	9.1	9.3
December ...	109.9	4.2	17.9	11.2	108.8	2.9	12.1	10.1
1982—								
March .....	111.8	1.7	7.0	10.6	110.6	1.7	7.0	9.3
June .....	114.5	2.4	10.0	10.7	113.3	2.4	10.0	9.6
September ..	118.5	3.5	14.8	12.3	117.0	3.3	13.9	10.7
December ...	121.9	2.9	12.1	10.9	120.2	2.7	11.2	10.5
1983—								
March .....	124.6	2.2	9.1	11.4	122.7	2.1	8.7	10.9
June .....	127.3	2.2	9.1	11.2	125.3	2.1	8.7	10.6

(a) Weighted average of the six state capitals combined. Base year 1980-81.

(b) Quarterly rate compounded over four quarters, e.g. 4.0 per cent per quarter is equivalent to 17.0 per cent p.a. ( $1.04 \times 1.04 \times 1.04 \times 1.04 = 1.17$ ).

(c) Affected by changes in the financing of health services.



*Consumer (Retail) Price Indexes, Various Countries*

The following table shows consumer (retail) price indexes for selected countries. It should be noted that the items priced and the weighting patterns used in constructing the indexes vary widely from country to country.

**Consumer (Retail) Price Indexes: Various Countries (a)**  
(Source: Monthly Bulletin of Statistics of the Statistical Office of the United Nations)

Year	Australia (b)	France	Federal Repub. of Germany	Italy	Japan	New Zealand	Switz- erland	United King- dom	USA
<i>Index Numbers (Base of each index: Year 1970 = 100.0)</i>									
1976 .....	184.9	166.9	140.4	199.8	188.4	r 190.4	147.3	214.9	146.6
1977 .....	207.6	183.2	145.6	236.6	203.6	r 217.8	149.2	249.0	156.1
1978 .....	224.0	199.8	149.6	265.3	r 211.3	r 243.8	150.8	269.6	167.9
1979 .....	244.3	r 221.3	155.8	304.5	r 218.9	r 277.1	156.2	305.8	187.2
1980 .....	269.2	251.3	164.3	369.1	r 236.4	r 324.7	162.5	360.8	212.4
1981 .....	295.3	285.0	174.0	441.1	248.0	374.7	173.1	403.6	234.1
1982 .....	328.1	318.7	183.3	513.7	254.6	434.9	182.8	438.3	248.2
<i>Percentage Increase Over Previous Year</i>									
1976 .....	13.6	9.2	4.2	16.8	9.3	r 17.0	1.7	16.5	5.8
1977 .....	12.3	9.8	3.7	18.4	8.1	14.4	1.3	15.9	6.5
1978 .....	7.9	9.1	2.7	12.1	3.8	11.9	1.1	8.3	7.6
1979 .....	9.1	r 10.8	4.1	14.8	3.6	13.7	3.6	13.4	11.5
1980 .....	10.2	r 13.6	5.5	21.2	8.0	r 17.2	4.0	18.0	13.5
1981 .....	9.7	13.4	5.9	19.5	r 4.9	15.4	6.5	11.9	10.2
1982 .....	11.1	11.8	5.3	16.5	2.7	16.1	5.6	8.6	6.0

(a) The items priced and the levels at which they are priced in these indexes vary widely from country to country.

(b) Consumer Price Index converted to base: year 1970 = 100.0.

*Average Prices of Foodstuffs, Hobart*

The average retail prices of selected foodstuffs in Hobart since 1978 are shown in the next table. The list, while representative of foodstuffs commonly consumed, is not exhaustive. For a description of foodstuffs in the Consumer Price Index regimen, see the earlier table 'Consumer Price Index, Percentage Contributions of the Total Index Aggregate'.

**Average Retail Prices of Selected Food Items: Hobart (a) (b)**  
(Cents)

Item	Unit	1978	1979	1980	1981	1982	
						Average price	Percentage increase (c)
Groceries, etc.—							
Bread, ordinary							
white, sliced .....	680 g	52.0	57.0	63.8	72.0	79.5	10.4
Flour, self-raising ....	1 kg	53.3	55.0	59.8	66.3	76.3	15.1
Tea .....	250 g	88.5	79.5	77.3	79.5	86.5	8.8
Coffee, instant .....	150 g	284.0	270.0	299.0	299.3	312.3	4.3
Sugar .....	2 kg	68.8	85.3	95.3	102.0	115.8	13.5
Rice .....	500 g	37.8	39.3	38.0	40.0	45.8	13.3
Breakfast cereal,							
corn based .....	500 g	75.3	82.3	88.8	100.0	112.3	12.3
Peaches, canned .....	825 g	71.3	75.8	80.0	86.5	99.0	14.5
Potatoes .....	1 kg	35.8	39.5	45.0	51.5	45.3	—12.0
Onions .....	1 kg	47.3	53.0	52.5	114.0	78.0	—31.6
Dairy produce, etc.—							
Butter .....	500 g	91.3	94.8	104.8	119.0	150.8	26.7
Cheese, processed ....	500 g	114.6	118.0	135.6	144.0	176.8	22.8
Margarine, table,							
poly-unsaturated ....	500 g	84.0	92.0	93.0	101.5	109.8	8.2
Eggs .....	1 doz (55g)	128.5	138.5	147.5	161.3	169.3	5.0
Bacon, rashers, pre-							
pack .....	250 g	126.5	149.5	170.5	182.5	204.8	12.2
Milk, fresh, bottled,							
delivered .....	2—600 ml	47.0	49.3	54.0	64.3	71.0	10.4
Meat—							
Beef—							
Rump steak .....	1 kg	391.5	580.0	659.8	666.0	658.0	—1.2
Silverside, corned ...	1 kg	247.5	379.5	441.8	447.5	441.8	—1.3
Lamb—							
Leg .....	1 kg	269.8	332.8	357.5	357.5	359.5	0.6
Loin chops .....	1 kg	277.8	349.3	371.0	378.0	373.8	—1.1
Pork, leg .....	1 kg	344.5	415.3	464.0	490.3	540.0	10.1

(a) The table units are not necessarily those for which the original price data were obtained; in such cases, prices have been calculated for the table unit.

(b) Prices are the averages of the recorded prices for the four quarters of each calendar year.

(c) Over the corresponding average 1981 price.

### Indexes of Relative Retail Prices of Food

The table below shows indexes of relative retail prices of food for the six state capitals, Canberra and Darwin, and for selected Tasmanian towns, as at March, for recent years. The indexes for each year are expressed to the base: weighted average of the six state capitals = 100. For a particular year, they show comparative retail prices based on the same selected 'basket' of food and grocery items and the same weighting pattern for each locality. The items priced for calculation of the indexes are generally those priced for the Monthly Food Index for March of the Consumer Price Index of the same year but excluding snacks and take-away foods (the annual *Indexes of Retail Prices of Food in Queensland Towns* (6401.3) published by the Queensland office of the Bureau lists the



food items included for the year to which it relates). The indexes compare relative retail prices of food in various localities at each point in time; they do not show movement over time in each locality. Priced data used for derivation of the indexes has been collected in special surveys of retail prices undertaken in March each year.

**Index Numbers of Relative Retail Prices of Food Items (a)**  
(Base: weighted average of the six state capitals at each point of time = 100)

	At March							
	1976	1977	1978	1979	1980	1981	1982	1983
Sydney .....	101	99	98	99	99	100	100	99
Melbourne .....	98	99	99	100	99	98	99	101
Brisbane .....	101	101	101	100	101	101	101	99
Perth .....	101	102	105	103	101	99	100	98
Adelaide .....	102	103	102	103	102	103	103	101
<b>Hobart .....</b>	<b>104</b>	<b>106</b>	<b>106</b>	<b>104</b>	<b>104</b>	<b>104</b>	<b>105</b>	<b>103</b>
Canberra .....	105	105	103	104	102	103	102	102
Darwin .....	121	105	115	111	114	116	115	111
Launceston .....	100	n.a.	102	103	104	103	104	104
Devonport .....	101		103	104	105	105	105	104
Burnie .....	101		104	102	103	103	104	106
Queenstown .....	108		111	107	107	109	107	109

(a) These indexes compare retail prices between various localities of a selected 'basket' of food items at each point in time. They do not show movement over time in each locality.

The indexes are subject to the following limitations:

- (i) As the indexes are compiled by pricing, in each town or city, the same list of major food items, specified as to quantity and as far as possible as to quality, the comparisons measure relative retail prices only for the field covered by the selected items as combined by a common set of weights. They cannot be considered as reflecting relative prices in other fields of expenditure. A common list of items or 'basket' such as this *does not reflect differences in living costs which result directly from differences in modes of living*, e.g. as reflected by climate and availability of items, etc., or levels of living between localities. Users of these indexes should bear in mind that the degree of appropriateness of the items and weights used would vary from centre to centre, and that the differences in price levels as indicated by the indexes should be regarded as approximations only.
- (ii) In some instances, the relationship between towns in March of one year may differ from that existing between them at another date during that year or in other years, because seasonal influences on prices of some items, e.g. potatoes and meat, may occur at different times in different localities. In these circumstances *it is desirable to study the run of index numbers for a number of years.*

### Wholesale Price Indexes

#### General

The Bureau compiles several wholesale price indexes of basic materials. These include the 'Price Index of Materials used in House Building' and the 'Price Index of Materials used in Building other than House Building'. The *Price Index of Materials Used in the Manufacturing Industry* (for Australia) was first published by the Bureau in July 1975 and the *Price Index of Articles Produced by Manufacturing Industry* in October 1976.

#### Wholesale Price Index of Materials Used in House Building

*General:* This index is complementary to the 'Other than House Building' index and measures the change in prices of selected materials used in house construction.

*Scope and Composition:* The materials selected and weights given to the items were in accordance with the usage of materials in a sample of representative house types constructed in or about 1968-69. The house types included in the sample were those using brick, brick veneer, timber or asbestos-cement sheeting for the outer-walls. Within the four major construction types account was taken of a range of characteristics, e.g. material used for internal partitions, window frames, roofs, etc. The number of items included in the index range from 49 (Brisbane) to 51 (Perth). The items are combined into 11 groups; an 'All groups' index is also published. Standards are fixed and price movements are for items of a constant quality.

*Derivation of Items and Weights:* The index is a fixed quantity weights index and is calculated by the method known as the 'weighted arithmetic mean of price relatives'. The items and weights used are based on the reported values of materials used in the selected houses in each state capital city urban area. Information about materials used and their value was obtained for a total of 114 houses. The material values derived for each state capital city were then used to develop weighting patterns for the individual cities and aggregated to give a weighting pattern for the six state capital cities combined.

*Base Period:* The index has a base year 1966-67 = 100.0 but the weighting pattern is more appropriate to material usage during 1968-69.

*Prices:* Prices relate to specified standards for each commodity and are obtained in all state capital city urban areas from representative suppliers of materials used in house building. The prices are collected as at the mid-point of the month to which the index refers.

*Index Numbers:* The index has been compiled for each month from July 1966 and for financial years from 1966-67. Index numbers are published for each group and combined into an 'All groups' number for each state capital city and the six state capital cities combined.

The following table compares movements in the index numbers for each of the six capital cities and six capitals combined for recent years. (The separate city indexes allow comparisons to be drawn between capital city areas as to differences in the degree of price movement from period to period, but not as to differences in price levels.)

Price Index of Materials Used in House Building  
All Groups Index Numbers: Six State Capital Cities  
(Base of Each Index: Year 1966-67 = 100.0)

Year or month	State capital cities						Six capitals (a)	
	Sydney	Mel-bourne	Brisbane	Adelaide	Perth	Hobart	Index number	Percentage change (b)
1977-78 .....	254.0	238.6	265.1	270.7	253.4	256.7	252.0	+ 8.2
1978-79 .....	272.7	251.4	281.3	292.1	268.2	273.6	268.1	+ 6.4
1979-80 .....	309.5	283.4	315.0	338.5	299.4	304.2	302.9	+ 13.0
1980-81 .....	347.6	324.7	363.7	386.1	337.6	338.2	344.0	+ 13.6
1981-82 .....	378.5	355.5	407.2	427.2	373.2	371.7	377.9	+ 9.9
1982-83 .....	410.3	394.9	448.0	480.3	409.3	406.5	415.7	+ 10.0
1982—								
March .....	389.1	364.3	423.5	441.5	386.5	385.0	389.5	+ 4.7
June .....	395.9	375.8	430.2	456.3	393.3	394.4	398.5	+ 2.3
September .....	403.8	387.2	439.8	469.0	404.0	400.0	408.4	+ 2.5
December .....	407.3	390.2	444.7	476.1	408.6	401.6	412.4	+ 1.0
1983—								
March .....	415.1	404.5	454.9	488.5	414.4	407.3	422.5	+ 2.4
June .....	424.1	409.0	461.6	500.4	417.6	424.1	429.3	+ 1.6
Percentage Change June 1983 Over June 1982								
	+ 7.1	+ 8.6	+ 7.3	+ 9.7	+ 6.2	+ 7.5	+ 7.7	—

(a) Weighted average of six state capital cities. (b) Over preceding year or preceding month shown.

Index numbers for the Hobart capital city urban area for each group of items are given in the next table:

**Price Index of Materials Used in House Building**  
**Group Index Numbers: Hobart**  
 (Base of each Index: Year 1966-67 = 100.0)

<i>Year or month</i>	<i>Concrete mix, cement and sand</i>	<i>Cement products</i>	<i>Clay bricks, tiles, etc.</i>	<i>Timber, board and joinery</i>	<i>Steel products</i>	<i>Other metal products</i>
Value weight (a) .....	7.25%	7.01%	10.14%	38.15%	7.49%	7.93%
1977-78 .....	219.5	253.0	306.4	282.3	279.2	218.4
1978-79 .....	227.3	278.6	326.6	300.7	297.9	231.9
1979-80 .....	246.9	309.5	354.2	337.1	329.1	271.4
1980-81 .....	266.0	343.5	376.2	377.8	380.6	304.0
1982-83 .....	318.4	425.2	437.3	450.5	465.1	368.2
1982—						
March .....	287.5	389.0	424.5	432.7	436.7	349.8
June .....	303.5	410.1	429.4	441.9	448.2	352.3
September .....	309.4	426.7	438.6	442.6	454.6	358.3
December .....	314.4	426.0	438.6	441.1	436.6	364.4
1983—						
March .....	327.8	428.1	438.6	443.4	472.9	376.1
June .....	337.6	430.6	441.3	478.8	478.5	383.5
<i>Percentage Change June 1983 Over June 1982</i>						
	+ 11.2	+ 5.0	+ 2.8	+ 8.4	+ 6.8	+ 8.9
<i>Year or month</i>	<i>Plumbing fixtures, etc.</i>	<i>Electrical installation materials</i>	<i>Installed appliances</i>	<i>Other materials</i>	<i>All groups</i>	
					<i>Index number</i>	<i>Percentage change (b)</i>
Value weights (a) ...	2.74%	1.61%	6.98%	10.7%	100.00%	—
1977-78 .....	247.4	201.2	154.9	235.6	256.7	+ 9.2
1978-79 .....	258.5	224.5	161.6	253.0	273.6	+ 6.6
1979-80 .....	293.5	265.3	169.5	277.9	304.2	+ 11.2
1980-81 .....	337.0	296.8	181.2	310.7	338.2	+ 11.2
1981-82 .....	373.4	325.7	190.6	349.1	371.7	+ 9.9
1982-83 .....	398.4	376.4	203.2	393.5	406.5	+ 9.4
1982—						
March .....	385.1	340.4	191.3	364.1	385.0	+ 5.4
June .....	391.0	346.6	200.3	371.8	394.4	+ 2.4
September .....	394.5	364.9	200.1	384.3	400.0	+ 1.4
December .....	391.3	379.3	200.7	388.8	401.6	+ 0.4
1983—						
March .....	406.9	385.1	203.9	402.9	407.3	+ 1.4
June .....	406.9	405.4	211.1	404.9	424.1	+ 4.1
<i>Percentage Change June 1983 Over June 1982</i>						
	+ 4.1	+ 17.0	+ 5.4	+ 8.9	+ 7.5	..

(a) Composition and weighting pattern as at reference base year.

(b) Over preceding year or preceding month shown.

#### *Price Index of Materials Used in Building Other Than House Building*

*General:* The index measures changes in the prices of selected materials used in the construction of buildings other than houses and 'low-rise' flats (in general, those up to three storeys). The original index had a reference base as the year 1966-67 = 100.0. This

has been replaced with the publication in March 1981 of a revised index with a reference base as the year 1979-80 = 100.0.

*Prices:* Price series used relate to specified standards of each commodity and are obtained in all state capital city urban areas from representative supplies of materials used in building. The prices are collected as at the mid-point of the month to which the index refers, or as near thereto as practicable. There are some exceptions to the use of local prices in the indexes for each capital city area. In a few cases where suitable price series are not currently available for an item in a given city, imputation is necessary. For each capital city area, the whole of the group 'electrical installation materials' and the majority of the items in the group 'mechanical services components' were based on Sydney and Melbourne price series for the compilation of the original index. In the revised index, certain commodities that comprise the group 'electrical materials' are now priced in Hobart.

*Revised Price Index:* A review of the *Price Index of Materials Used in Building Other Than House Building* was completed in March 1981 with publication of index numbers compiled on a monthly basis from July 1979. The reference base of the revised index is the year 1979-80 = 100.0. As for the original index the revised index is also a fixed quantity weights index and is calculated by the method known as the 'weighted arithmetic mean of price relatives'.

The composition of the index is in accordance with the estimated average values of materials used in the construction of buildings (other than houses) commenced in the six state capital cities in the three years ended June 1977. The index comprises 68 items combined in 10 industry of origin groups in addition to an 'all groups' index. Items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality.

The following table compares movements in the 'all groups' index numbers for each of the six state capital cities and the six capitals combined:

**Price Index of Materials Used in Building Other Than House Building**  
**All Groups Index Numbers:**  
**Six State Capital Cities**  
**(Base of each Index: Year 1979-80 = 100.0)**

Year or month	State capital cities						Six capitals (a)	
	Sydney	Mel- bourne	Brisbane	Perth	Adelaide	Hobart	Index Number	Per- centage change (b)
1979-80 .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	+ 13.0
1980-81 .....	113.1	112.7	113.2	112.2	113.8	111.6	112.9	+ 12.9
1981-82 .....	126.6	123.6	126.3	123.8	127.4	122.9	125.4	+ 11.1
1982-83 .....	142.1	136.7	142.2	139.1	144.5	136.3	140.4	+ 12.0
1982—								
March .....	131.4	127.4	130.9	127.9	132.3	126.8	129.8	+ 5.7
June .....	134.8	131.4	135.3	132.8	136.4	130.8	133.8	+ 3.1
September .....	140.1	135.1	138.5	141.1	137.0	133.3	138.1	+ 3.2
December .....	142.1	136.2	141.6	144.9	139.3	135.8	140.2	+ 1.5
1983—								
March .....	143.8	138.6	144.8	147.2	140.6	138.4	142.3	+ 1.5
June .....	145.7	139.9	147.4	149.1	142.8	142.0	144.2	+ 1.3
<b>Percentage Change June 1983 Over June 1982</b>								
	+ 8.1	+ 6.5	+ 8.9	+ 9.3	+ 7.5	+ 8.6	+ 7.8	..

(a) Weighted average of six state capital cities.

(b) Over preceding year or previous month shown.

The separate city index numbers measure price movements within each metropolitan area individually and do not allow comparison of absolute price levels.

Index numbers are also compiled for the Hobart area for selected materials and for special combinations of materials. These are shown in the following tables.

**Price Index of Materials Used in Building Other Than House Building**  
**Selected Major Building Material Index Numbers, Hobart**  
 (Base of Each Index: Year 1979-80 = 100.0)

Year of month	Structural timber	Clay Bricks	Ready mixed concrete	Precast concrete products	Galvanised steel decking cladding etc	Structural steel	Reinforcing steel bar, fabric and mesh
1979-80 .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1980-81 .....	113.9	104.7	107.2	113.0	113.1	110.8	114.4
1981-82 .....	123.2	119.0	113.9	137.7	128.6	122.1	125.6
1982-83 .....	130.9	136.1	127.2	154.8	140.9	131.4	138.2
1982—							
March .....	129.0	125.9	113.9	146.3	132.0	126.5	130.2
June .....	129.0	128.8	121.5	149.4	135.0	130.1	135.1
September .....	129.0	137.4	123.3	153.7	137.7	130.4	135.1
December .....	126.6	137.4	125.5	153.7	139.9	131.0	138.2
1983—							
March .....	128.2	137.4	130.9	157.0	145.1	132.2	138.6
June .....	140.9	139.1	135.6	158.0	143.4	134.0	146.4

*Percentage Change June 1983 Over June 1982*

	+ 9.2	+ 8.0	+ 11.6	+ 5.8	+ 6.2	+ 3.0	+ 8.4
Year or month	Aluminium windows	Steel windows, doors, louvres, etc.	Builders' hardware	Sand, aggregate and filling	Carpet	Paint	Non-ferrous pipes
1979-80 .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1980-81 .....	116.1	117.2	117.2	108.3	116.1	117.7	98.9
1981-82 .....	123.6	133.0	128.5	113.4	126.5	125.0	97.8
1982-83 .....	136.6	142.6	142.7	123.6	133.6	143.7	106.7
1982—							
March .....	131.6	137.6	134.0	113.9	127.8	126.6	98.0
June .....	132.7	140.2	136.6	117.8	128.8	131.7	98.9
September .....	132.9	140.2	141.0	119.2	133.1	139.4	102.2
December .....	136.2	141.0	141.0	121.2	133.5	143.7	104.8
1983—							
March .....	138.2	144.3	144.2	128.5	134.6	146.6	109.6
June .....	140.4	147.3	146.2	134.9	134.9	149.0	118.3

*Percentage Change June 1983 Over June 1982*

	+ 5.8	+ 5.1	+ 7.0	+ 14.5	+ 4.7	+ 13.1	+ 19.6
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*Linking of the original and revised index:* The original index and the revised index overlap for the period July 1979 to January 1981. The indexes could therefore be linked at any point of time within this overlap period. A technical note showing a method of linking the revised index groups to previous index groups, so that series from the revised index can be converted to the reference base of the original index is included with the February 1981 edition of *Price Index of Materials Used In Building Other Than House Building* (Catalogue No. 6407.0) which is available upon request.

**Price Index of Materials Used in Building Other Than House Building  
Special Combinations of Building Materials Index Numbers, Hobart  
(Base of Each Index: Year 1979-80 = 100.0)**

<i>Year or month</i>	<i>All electrical materials</i>	<i>All mechanical services</i>	<i>All plumbing materials</i>	<i>All groups excluding electrical materials and mechanical services</i>	<i>All groups</i>
1979-80 .....	100.0	100.0	100.0	100.0	100.0
1980-81 .....	110.1	112.8	111.5	111.6	111.6
1981-82 .....	121.7	125.9	120.8	122.5	122.9
1982-83 .....	141.4	142.0	131.1	134.6	136.3
1982—					
March .....	124.7	131.6	123.3	126.1	126.8
June .....	130.6	135.2	125.8	129.9	130.8
September .....	136.0	138.7	128.6	131.9	133.3
December .....	142.4	141.8	129.7	133.8	135.8
1983—					
March .....	145.5	144.2	133.8	136.4	138.4
June .....	149.7	147.3	136.5	140.0	142.0
<i>Percentage Change: June 1983 Over June 1982</i>					
	+ 14.6	+ 8.9	+ 8.5	+ 7.8	+ 8.6

**Australian Export Price Index**

In July 1979, the revised Export Price Index on reference base 1974-75 = 100 was introduced, replacing the previous index which had a reference base of 1959-60 = 100.

The revised index is a fixed weights index and is weighted using the pattern of Australian exports during the three years 1974-75, 1975-76 and 1976-77. It has a more comprehensive coverage of exports than the former index; in particular exports of manufactured goods are covered more fully.

The revised Export Price Index relates to all exports of merchandise from Australia. It includes re-exports of merchandise (that is, goods which are imported into Australia and exported at a later date without physical transformation). The index numbers for each month relate to prices of those exports of merchandise that are physically shipped from Australia during that month.

The commodities directly represented in the index were selected on the basis of their export values in the years 1974-75, 1975-76 and 1976-77. They were allocated weights in accordance with the average value of exports for each commodity over the period 1974-75 to 1976-77. The 1975-76 and 1976-77 export values for each commodity were revalued at 1974-75 prices before averaging.

In general, prices are obtained from major exporters of the selected commodities included in the index. The point of pricing for the Export Price Index is the point at which the goods physically leave Australia, that is prices are on the basis f.o.b. at main Australian ports of export.

As the prices used in the index are expressed in Australian currency, changes in the relative values of the Australian dollar and overseas currencies can have a direct impact on price movements for the many commodities that are sold in currencies other than Australian dollars. Where exports are sold at prices expressed in terms of a foreign currency and forward exchange cover is used, the prices used in the index exclude forward exchange cover.

The price series used relate to specified standards, grades, types, etc. of each commodity with the aim of incorporating in the index price changes for exports of representative goods of constant quality. Wherever possible, prices to predominant export markets are used for each of the specified goods priced, in order to lessen the impact

of price variations attributable solely to changes, over time, in market destinations. In most cases prices are combined using fixed weights between markets.

Export Price Index Numbers: Australia  
(Base of Each Index: Year 1974-75 = 100)

(Base of Each Index: Year 1974-75 = 100)

<i>Year or month</i>	<i>Meat and meat prepara- tions</i>	<i>Dairy products and eggs</i>	<i>Fish and fish prepara- tions</i>	<i>Cereals and cereal prepara- tions</i>	<i>Fruit and vege- tables</i>	<i>Sugar and sugar prepara- tions</i>	<i>Hides, skins and furskins raw</i>
1978-79 .....	234	113	229	86	167	74	308
1979-80 .....	285	123	230	107	184	95	326
1980-81 .....	274	141	227	121	210	143	231
1981-82 .....	250	164	254	120	211	92	226
1982-83 .....	279	184	305	123	233	67	243
1982—							
March .....	244	170	266	118	203	84	247
June .....	255	176	284	117	215	82	236
September .....	268	184	295	116	225	67	227
December .....	263	185	307	121	224	63	235
1983—							
March .....	283	188	314	127	231	66	246
June .....	319	184	321	133	257	79	282

<i>Year or month</i>	<i>Textile fibres and their wastes</i>	<i>Metal- liferous ores and metal scrap</i>	<i>Coal, coke and briquettes</i>	<i>Petroleum, petroleum products and related materials</i>	<i>Animal oils and fats</i>	<i>Manu- factur- ers of iron and steel</i>	<i>Manu- factur- ers of non- ferrous metals</i>
1978-79 .....	153	157	178	157	157	118	161
1979-80 .....	181	189	180	241	169	145	255
1980-81 .....	190	207	189	290	145	142	210
1981-82 .....	200	231	231	307	139	139	176
1982-83 .....	206	264	270	334	138	149	180
1982—							
March .....	199	235	235	313	138	139	168
June .....	208	254	256	320	139	142	160
September .....	205	266	272	332	133	151	170
December .....	202	264	269	341	132	148	165
1983—							
March .....	204	271	288	339	137	144	192
June .....	220	263	260	326	152	155	201

<i>Year or month</i>	<i>Power generating machinery and equipment</i>	<i>Specialised machinery for particular industries</i>	<i>Road vehicles</i>	<i>Gold</i>	<i>All groups</i>	
					<i>Index</i>	<i>Percentage change (a)</i>
1978-79 .....	154	178	154	165	144	+ 12.5
1979-80 .....	173	195	166	347	174	+ 20.8
1980-81 .....	194	211	187	408	185	+ 6.3
1981-82 .....	214	234	211	290	187	+ 1.1
1982-83 .....	232	267	239	374	203	+ 8.6
1982—						
March .....	217	240	218	258	187	+ 1.6
June .....	221	246	222	248	195	+ 4.3
September .....	224	251	233	372	200	+ 2.6
December .....	231	264	240	378	199	- 0.5
1983—						
March .....	237	285	247	406	209	+ 5.0
June .....	237	288	248	390	213	4P 1.9

(a) Over preceding year or month shown.

### Prices Indexes and Inflation

There is no practical means available for *directly and precisely* measuring the rate of inflation, as this would entail regular measurement of both the price and volume of *all* goods and services sold and an ability to take into account constantly changing standards, qualities and types of these goods and services. However, price indexes, although not a true measure of inflation, are often used as giving the best available rough indication of the rate of inflation.

When a rate of inflation is stated for a particular country, the rate of increase in the official retail price index has usually been quoted. However, any such measure actually relates only to purchasing power with respect to the 'basket' of items in the particular index used, combined in their specified proportions. Retail price indexes *do not* measure changes in raw material prices, wholesale prices, industrial plant and equipment costs, etc., and, therefore, cannot be regarded as measuring the trend in the overall internal price structure of an economy (i.e the rate of inflation).

For a more detailed coverage of this topic, see the article under the above heading in the 1976 *Year Book*. The table below shows, for recent years, the varying results obtained when different price index series are used as a measure of the change in prices and of purchasing power:

Selected Price Indexes: Comparison

Year	Consumer price index (a)		Price index of materials used in—			Australian GDP implicit price deflator (d)
	Hobart, all groups	Six state capitals combined, all groups	House building, Hobart (b)	Manufacturing industry Australia (c)		
				Imported materials	All groups	
Index Numbers						
1977-78 .....	77.1	76.7	256.7	257.0	198.5	83.6
1978-79 .....	83.1	83.0	273.6	275.7	248.8	90.1
1979-80 .....	91.6	91.4	304.2	366.4	321.8	100.0
1980-81 .....	100.0	100.0	338.2	413.0	353.2	r 110.0
1981-82 .....	110.0	110.4	371.7	435.7	r 358.9	r 121.4
1982-83 .....	121.8	123.1	406.5	464.9	388.0	134.6
Percentage Increase Over Preceding Year						
1977-78 .....	9.8	9.4	9.2	10.2	9.0	7.7
1978-79 .....	7.8	8.2	6.6	7.3	25.3	7.8
1979-80 .....	10.2	10.1	11.2	32.9	29.3	11.0
1980-81 .....	9.2	9.4	11.2	12.7	9.8	r 10.0
1981-82 .....	10.0	10.4	9.9	5.5	1.6	r 10.4
1982-83 .....	10.7	11.5	9.4	6.7	8.1	10.9
Price (e) of an Article Worth \$100 in 1976-77 if its Price Increased at the Same Rate as the Respective Price Index (\$)						
1976-77 .....	100.00	100.00	100.00	100.00	100.00	100.00
1977-78 .....	109.83	109.42	109.19	110.21	109.01	107.73
1978-79 .....	118.38	118.40	116.38	118.22	136.63	116.11
1979-80 .....	130.48	130.39	129.39	157.12	176.72	128.87
1980-81 .....	142.45	142.65	143.85	177.10	193.96	r 141.76
1981-82 .....	156.70	157.49	158.10	186.84	197.03	r 156.50
1982-83 .....	173.47	175.60	172.96	199.36	212.99	173.56



## Selected Price Indexes: Comparison—continued

Year	Consumer price index (a)		Price index of materials used in—			
	Hobart, all groups	Six state capitals combined, all groups	House building, Hobart (b)	Manufacturing industry Australia (c)		Australian GDP implicit price deflator (d)
				Imported materials	All groups	
1976-77 .....	1.00	1.00	1.00	1.00	1.00	1.00
1979-80 .....	0.77	0.77	0.77	0.64	0.57	0.78
1980-81 .....	0.70	0.70	0.70	0.56	0.52	0.71
1981-82 .....	0.64	0.63	0.63	0.54	0.51	0.64
1982-83 .....	0.58	0.57	0.58	0.50	0.47	0.58

*Value of a \$1 Note Expressed in Terms of 1976-77 Values if the Respective Price Index is Taken as a Measure of Inflation (\$)*

(a) Base of each index: year 1979-80 = 100.0.

(b) Base of each index: year 1966-67 = 100.0.

(c) Base of each index: year 1968-69 = 100.0.

(d) Index based on estimates of Australian Gross Domestic Product at current prices and at average 1979-80 prices available in September 1982, not a fixed weights index (see 'Implicit Price Deflators' in the section on Australian National Accounts in Chapter 19).

(e) Average price of the article during a particular year; these figures (rounded) can also be used as the respective indexes to the new base: year 1976-77 = 100.0.

The next table demonstrates the (compounding) effects of a range of constant rates of price increase over a 20-year period. In real life, prices never maintain a constant rate of change and rates of price changes vary widely for different groups of items. Nevertheless, this table is still useful for demonstrating the type of effect that would result from various constant rates of price increase.

## The Effect of Various Rates of Price Increase

Number of years from base year	Annual rate of price increase (per cent)					
	5	10	15	20	25	30
<i>Price of an Article Originally Worth \$100 (\$) (a)</i>						
0 (base year) .....	100.00	100.00	100.00	100.00	100.00	100.00
1 .....	105.00	110.00	115.00	120.00	125.00	130.00
3 .....	115.76	133.10	152.09	172.80	195.31	219.70
4 .....	121.55	146.41	174.90	207.36	244.14	285.61
5 .....	127.63	161.05	201.14	248.83	305.18	371.29
10 .....	162.89	259.37	404.56	619.17	931.32	1 378.58
15 .....	207.89	417.72	813.71	1 540.70	2 842.17	5 118.59
20 .....	265.33	672.75	1 636.65	3 833.76	8 673.62	19 004.96
<i>Value of a \$1 Note Expressed in Base Year Dollar Values (\$)</i>						
1 .....	.95	.91	.87	.83	.80	.77
2 .....	.91	.83	.76	.69	.64	.59
4 .....	.82	.68	.57	.48	.41	.35
5 .....	.78	.62	.50	.40	.33	.27
10 .....	.61	.39	.25	.16	.11	.07
15 .....	.48	.24	.12	.06	.04	.02
20 .....	.38	.15	.06	.03	.01	.01

(a) These figures could also be regarded as price indexes to the base, year 0 = 100.0.

### Calculation of Price Index Series for Particular Purposes

Special purpose index series are often useful. For example, an index of average weekly earnings for Tasmania, base year 1974-75 = 100.0, may be useful in relation to the costs of a large construction program commenced in that year; an office rental rate may be adjusted regularly according to movements in the consumer price index from the date of commencement of the leasing agreement.

Calculation of a special purpose price index series based on unit values (or index numbers) available for a series of years is easily carried out as follows: choose the base year and let the index number for that year equal 100.0; then the index number for any other year equals—

$$\frac{\text{value for that year}}{\text{value for the base year}} \times \frac{100.0}{1}$$

### Using a Price Index Series

If the *relevant* price index is available, a *current value* series may be readily adjusted to values at *constant prices* relative to any base year desired, in order to allow a more realistic assessment of trends over time.

For example, the year *n* value, at year *m* constant prices

$$= \frac{\text{current value for year } n}{1} \times \frac{\text{price index for year } m}{\text{price index for year } n}$$

If it was desired to convert a current value of 100m in 1981-82 to constant 1977-78 values based on the Hobart all groups consumer price index (see the last table for index numbers), the calculations would be as follows:

$$\text{Value at 1977-78 prices} = \$100\text{m} \times \frac{77.1}{110.0} = \$70.1\text{m}$$

## WAGES

### The Basic Wage

#### General

The present position is as follows: wages fixed by Tasmanian State Industrial Boards still consist of two parts, namely a *basic wage* and a *margin*: wages fixed by the Federal Conciliation and Arbitration Commission are expressed as a *total wage*, the basic wage concept having been abolished in federal awards in 1967. All state industrial authorities with the exception of Victoria's have retained the basic wage concept. A more detailed history of the basic wage can be found in the 1970 *Year Book*.

#### State Basic Wage Rates

The following table shows the awards and determination made by Tasmanian industrial authorities from 1977:

**Tasmanian Basic Wage Rates**  
(\$)

Date of operation (a)	Adult persons	Date of operation (a)	Adult persons
1977 24 May .....	69.90	1979 27 June .....	80.00
1977 22 August .....	71.30	1980 4 January .....	83.60
1977 12 December .....	72.40	1980 14 July .....	87.10
1978 28 February .....	73.50	1981 9 January .....	90.30
1978 7 June .....	74.50	1981 7 May .....	93.60
1978 12 December .....	77.50	1983 6 October .....	97.60

(a) Rates operative from the first pay-period commencing on or after the date shown.

101.60

### Minimum Wages

The Federal Conciliation and Arbitration Commission announced in its decision of 8 July 1966 that it intended to grant relief to low wage earners by inserting a provision prescribing a minimum wage. It ordered that the minimum male wage paid under the Metal Trades Award should be the appropriate basic wage plus \$3.75 a week (e.g. in Tasmania a basic wage of \$33.40 plus \$3.75 giving a minimum wage of \$37.15).

Tasmanian Industrial Boards introduced the concept of the minimum wage into their determinations in June 1967. Weekly minimum wage rates prescribed in Federal and State awards for recent years are shown in the following table:

Minimum Wages, Adult Males: Federal and State Awards  
(\$)

<i>Date operative (a)</i>	<i>Federal awards</i>	<i>Tasmanian State Industrial Boards' determinations</i>
12 December 1978 .....	120.70	121.90
27 June 1979 .....	124.60	125.80
4 January 1980 .....	130.20	131.50
14 July 1980 .....	135.70	137.00
9 January 1981 .....	140.70	142.10
7 May 1981 .....	145.80	147.20
1 November 1982 .....	145.80	168.00
6 October 1983 .....	152.10	175.20

(a) Rates operative from the first pay-period commencing on or after the date shown.

### Total Wage Concept

For a full account of events leading to the adoption of a 'total wage' concept see the 1970 *Year Book*. The decision abolishing the basic wage in awards of the Federal Conciliation and Arbitration Commission was handed down in June 1967 when a \$1.00 increase was awarded, to be added to the *total wage*. Results of recent national wage cases prior to the adoption of wage indexation principles in April 1975 follow:

- 1973 The total wage was increased by a combination of a two per cent increase plus a flat increase of \$2.50. The minimum wage was increased by \$9.00 per week.
- 1974 The Arbitration Commission again increased total award rates by a combination of a two per cent increase plus a flat rate increase of \$2.50. The minimum wage was increased by \$8.00 per week.
- 1975 Total wages were increased by 3.6 per cent in line with the movement of the Consumer Price Index during the March quarter 1975. The minimum wage was increased by \$8.00 per week, effective from 1 January 1975, and by a further \$4.00 when trial indexation was introduced.

### Total Wage Concept in Tasmania

The Federal award of June 1967 was followed by a test case argued before the Chairman of the State Industrial Boards. The employers asked for adoption of the total wage concept. The unions opposed this and argued for a \$7.30 increase in the basic wage; if a lesser amount was determined, then a *minimum total wage* of \$40.70 should nevertheless be fixed.

The decision in the test case (Electrical Trades) was that both male and female rates should be increased by \$1; the increase, however, should be regarded as *raising the basic wage* which would be retained for the present in State determinations. The State Industrial Boards have retained the basic wage and margins concepts in awards handed down following subsequent national wage case determinations of the Federal Conciliation and Arbitration Commission.

### National Wage Case Decisions

The Conciliation and Arbitration Commission began hearing submissions regarding

wage indexation subsequent to the publication of the June quarter 1975 Consumer Price Index. Submissions were made by the Federal Government, state governments, tribunals, private employers and trade unions. The Commission also sat to consider whether subsequent increases should be awarded, in line with the principles of wage indexation, following publication of the Consumer Price Index for each quarter.

On 31 July 1981 the Full Bench stated that they had abandoned the system of wage fixation based on indexation. The Full Bench stated that the viability of the system depended on the voluntary co-operation of all participants in industrial relations including those not directly represented at National Wage Hearings and concluded that events since April 1981 had shown clearly that the commitment of the participants to the system is not strong enough to sustain the requirements for its continued operation.

In September 1983 the Arbitration Commission met to consider an application by the ACTU for a 4.3 percent increase in wages to compensate for CPI increases in the March and June quarters. The Full Bench granted the increase subject to the unions giving firm public undertakings that they will abide by the principles of wage indexation and pursue no extra claims. The decision was to be followed by non-automatic six monthly adjustments to wages for movements in the CPI during the previous two quarters and was to operate for two years.

The following table shows the increases made by the Conciliation and Arbitration Commission in National Wage Case decisions from August 1977:

General Increases in Award Total Wages: National Wage Cases Decisions

Date operative (a)		Increase
1977—	22 August .....	2.0 per cent
	12 December .....	1.5 per cent
1978—	28 February .....	1.5 per cent (b)
	7 June .....	1.3 per cent
	12 December .....	4.0 per cent
1979—	27 June .....	3.2 per cent
1980—	4 January .....	4.5 per cent
	14 July .....	4.2 per cent
1981—	9 January .....	3.7 per cent
	7 May .....	3.6 per cent
1983—	6 October .....	4.3 per cent
1984—	6 April .....	4.1 per cent
(a) Operative from the beginning of the first pay-period commencing on or after the date shown.		
(b) Increase of 1.5 per cent up to a maximum of \$2.60 per week.		2.6 percent

### Award Rates of Pay Indexes

#### General

The construction of the award rates indexes is similar in general design to other indexes such as the Consumer Price Index and the Wholesale Price Indexes and is based on a representative 'basket' of occupations. The indexes of award rates depict *movements*. They are updated monthly on the basis of advices of award variations determined or authorised by industrial tribunals. Variations to some unregistered collective agreements are also included in the indexes; that is, those agreements made by an employer with a group of employees and which are not registered with a Federal or State industrial arbitration authority.

Based on a representative sample of award designations, the indexes are designed to measure general *trends* in award rates of pay. They do not measure relative *levels* of average award rates of pay between states and industries and exclude the effect of changes in the relative importance of industries, awards and occupations.

#### Definitions

*Award rate of pay.* The award rates used in the compilation of the indexes are those prescribed for a full week's work (excluding overtime). These rates generally consist of

the base rate and any allowances or loadings that are applicable to *all* workers under a specific award designation. In some awards included in the indexes, regarded as paid rates awards, the award rate is set to absorb likely over-award payments.

*Wage and salary earners.* The coverage of the indexes is confined to full-time adult wage and salary earners whose rates of pay are normally varied in accordance with awards. For the benefit of users separate indexes have been produced relating to wage earners only (which are broadly comparable with the scope of the old Wage Rates Index). In order to produce separate indexes for wage earners and wage and salary earners it was necessary to devise some arbitrary means of distinguishing between the two. For the purpose of constructing these indexes, the following definitions were adopted:

- (i) wage earners — those engaged mainly in manual work and/or employed in blue collar occupations. Remuneration for wage earners is usually stated in terms of a weekly wage;
- (ii) salary earners — those engaged mainly in non-manual work and/or employed in white collar occupations. Remuneration for salary earners is normally stated in terms of an annual salary.

*Standard weekly hours of work* relates to the number of hours per week prescribed in awards, etc. for full-time workers in particular occupations. For certain occupations (eg. teachers, university lecturers) no specific hours are prescribed. Therefore indexes of hourly award rates of pay have been compiled for wage earners only.

*Award designation* relates to the specific description of an occupation in an award etc. (eg. Metal machinist, Class 1).

Details for adult males and adult females covered by Federal awards etc. and for those covered by State awards may change at any time as a result of the transfer of particular awards or occupations from one jurisdiction to another.

*Federal awards* include awards of, or collective agreements registered with, the Australian Conciliation and Arbitration Commission, the Coal Industry Tribunal, the Flight Crew Officers Tribunal and determinations of the Australian Public Service Arbitrator; and unregistered collective agreements operative in more than one state or territory where these are significant in the particular industries to which they refer.

*State awards* include awards, or determinations of, or collective agreements registered with, State industrial tribunals together with certain unregistered collective agreements where these are significant in the particular industries to which they refer and operate within one state only.

The proportions of employees covered by Federal and State awards vary considerably between states. In addition, the proportions of employees engaged in the respective industries and occupations differ from state to state. As a result there may be differences between the series for the several states.

#### *Allowances and Loadings*

For some award designations, general loadings of various kinds are included where these apply to all workers under particular award designations, eg. industry allowances. Loadings payable because of length of service (eg. service increments) have been included where appropriate. However, loadings that apply only in special circumstances (eg. those payable because of working in wet, dirty or confined places, excess fares incurred due to location of building site, etc) are excluded. The indexes include supplementary payments specified in a number of awards such as the Metal Industry Award Part 1 and the Western Australian Metal Trades (General) Award.

Award rates of pay index numbers for adult males are not comparable with 'average weekly earnings per employed male unit' appearing in a later section of this chapter; the latter includes not only the earnings of adult wage-earners but also those of salaried

employees, junior wage-earners and part-time and casual employees; included also are over-award payments and overtime earnings. Tasmanian details by industry group are given in the next table:

**Award Rates of Pay Index Numbers, Tasmania**  
**Adult Persons: Industry Groups, June 1983 (a)**

<i>Industry group</i>	<i>Wage earners</i>	<i>Wage and salary earners</i>
Mining .....	162.7	162.7
Manufacturing — (b) .....	184.2	184.1
Food, beverages and tobacco .....	177.7	177.7
Paper, paper products, printing and publishing .....	184.1	184.1
Metal products, machinery and equipment— .....	188.3	187.2
Basic metal products .....	177.3	177.3
Fabricated metal products, other machinery and equipment .....	202.8	196.5
Other (c) .....	189.5	189.5
Electricity, gas and water .....	190.8	190.8
Construction .....	186.1	185.0
Wholesale trade .....	177.4	181.7
Retail trade .....	177.9	178.3
Transport and storage .....	195.0	192.4
Communication .....	192.7	191.5
Finance, property and business services .....	*	178.5
Public administration and defence (d) .....	*	177.8
Community services .....	182.3	178.2
Recreation, personal and other services .....	189.0	189.0
All industries (e) .....	183.1	182.0

(a) Base of each index number: weighted average minimum weekly award rate, June 1976 = 100.00.  
These figures are subject to revision.

(b) Includes sub-divisions not shown separately or in 'other'.

(c) Includes ASIC sub-divisions 25, 28 and 34. (d) Excludes employees in the defence forces.

(e) Excludes employees in the defence forces, agriculture, services to agriculture and employees in private households employing staff.

\* Subject to sampling variability too high for most practical uses.

### *Australian Wage Index Numbers*

In the next table, index numbers are shown for each Australian state:

**Award Rates of Pay Indexes: Wage and Salary Earners, Australia (a)**  
**Base: Weighted Average Minimum Weekly Award Rate, June 1976 = 100**

<i>June</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas.</i>	<i>Australia</i>
<i>Males</i>							
1978 .....	117.5	117.8	117.7	118.3	118.5	<b>118.2</b>	117.8
1979 .....	127.8	127.8	126.9	128.2	128.6	<b>128.3</b>	127.7
1980 .....	137.4	137.6	136.4	137.9	138.5	<b>138.4</b>	137.4
1981 .....	155.9	156.0	155.4	156.1	157.6	<b>156.8</b>	156.0
1982 .....	177.2	178.7	179.6	175.7	179.9	<b>175.0</b>	177.9
1983 .....	184.0	186.6	187.8	185.0	187.0	<b>182.7</b>	185.5
<i>Females</i>							
1978 .....	117.8	117.8	117.7	120.7	118.2	<b>117.7</b>	118.0
1979 .....	127.0	120.9	126.5	129.7	127.1	<b>127.4</b>	127.1
1980 .....	135.7	134.8	135.2	139.4	134.7	<b>137.4</b>	135.5
1981 .....	156.9	154.2	155.7	159.0	155.8	<b>156.4</b>	155.9
1982 .....	175.2	176.3	174.7	178.0	174.2	<b>172.9</b>	175.4
1983 .....	183.7	186.1	183.9	186.5	182.6	<b>179.6</b>	184.3

(a) For a full week's work (excluding overtime), as prescribed in awards, determinations, etc.

### Average Weekly Earnings

#### *Source of Data*

The figures in the following section are derived from a quarterly Survey of Average Weekly Earnings which collects data from a sample of 3 500 private and government employers. Pay of members of the defence forces is not included.

#### *Definitions*

*Reference period* refers to the last pay-period ending on or before a specified date. For September quarter the date was 19 August 1983. If the operations of the establishment(s) covered by the return were seriously curtailed by an industrial dispute, breakdown, fire, etc., during the reference period, particulars for the previous normal pay-period were obtained.

*Employees* comprise male and female wage and salary earners who received pay in respect of the reference period were represented in the survey, except members of the Australian permanent defence forces, employees of establishments primarily engaged in agriculture, employees in private households employing staff, employees on workers' compensation, employees based outside Australia, employees paid solely from commission without a retainer, self-employed persons such as working proprietors of unincorporated businesses, subcontractors, and owner/drivers.

*Full-time employees* are those who work the agreed or award hours for a full-time employer in their occupation and who received pay for any part of the reference period; if agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 30 hours or more a week. *Full-time employees* temporarily on short-time, or who began or ceased work during the reference period, are included. Some employees, who were paid for a weekly attendance of less than 30 hours (e.g. aircrews, teachers, university lecturers), are classified as full-time if they worked the normal scheduled hours for a full-time week.

*Adults* are employees 21 years of age or over and those employees who are under 21 years of age but are paid at the full adult rate for their occupation.

*Weekly total earnings* refers to earnings of employees in the reference period, before taxation and any other deductions, eg. superannuation, board and lodging, have been made. Earnings comprise overtime earnings, ordinary time earnings, shift allowances, penalty rates, commission and similar payments, and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the reference period. Retrospective pay or pay in advance, annual leave loadings and other bonuses not related to the reference period are excluded.

*Weekly ordinary time earnings* refer to that part of *weekly total earnings* attributable to award, standard or agreed hours of work. Included in relation to these hours are shift allowances, penalty rates, commissions, bonuses and incentive payments, and one week's proportion of payments for annual and other leave taken during the reference period.

*Seasonal Influence:* Quarterly figures are affected by seasonal influences. For example, special payments, including prepayments for holiday periods, tend to raise the December quarter and to depress the March quarter averages. Comparisons as to trends are generally best made by relating complete years or corresponding periods of incomplete years. Alternatively, a 'seasonally adjusted' series may be used.

*Discontinuance of series:* Because of the different conceptual and methodological bases, the new series is not directly comparable with the payroll-tax-based series it replaces.

The following table shows average weekly earnings of male and female full-time employees in Tasmania from December 1981 to September 1983:

Average Weekly Earnings of Employees, Tasmania (a)  
(\$)

Quarter	Males			Females			Persons		
	Full-time adults		All males	Full-time adults		All females	Full-time adults		All employees
	Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings	Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings	Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings
1981—									
December .....	288.50	301.10	272.40	238.20	240.50	174.80	273.50	283.40	233.50
1982—									
March .....	296.20	313.80	291.90	241.70	249.10	189.70	280.80	295.50	253.40
June .....	313.20	331.40	308.10	262.20	266.90	197.70	299.30	313.80	265.60
September .....	323.30	336.50	310.20	274.20	277.60	198.20	309.90	320.50	267.00
December .....	328.30	343.90	317.10	282.70	284.60	200.00	315.90	327.60	269.20
1983—									
March .....	336.00	351.00	328.90	286.10	288.70	215.30	322.80	334.50	287.30
June .....	343.40	362.50	332.90	284.00	286.40	201.90	329.20	344.10	282.80
September .....	335.00	351.80	325.20	288.60	290.70	224.50	320.70	332.70	284.70

(a) Estimates are derived from the employer based Quarterly Survey of Earnings introduced in the September quarter 1981. These results are not strictly comparable with those previously derived from the payroll-tax-based series because of the different conceptual and methodological bases of the two series. Figures are rounded to the nearest ten cents.

The next table giving index numbers for average weekly earnings by year for each of the States provides a comparison of wage movements between States:

Average Weekly Earnings: Index Numbers by States and Australia (a)

Period	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Aust.
1977-78 ..	69.8	68.8	70.0	70.2	71.2	<b>68.6</b>	66.3	68.8	69.5
1978-79 ..	75.6	74.8	75.5	75.3	76.3	<b>73.1</b>	71.5	74.4	75.1
1979-80 ..	83.5	82.1	81.3	82.6	83.5	<b>82.3</b>	79.9	80.6	82.4
1980-81 ..	94.5	92.6	93.7	94.1	94.9	<b>93.3</b>	94.5	89.6	93.5
1981-82 ..	106.6	107.7	107.7	108.3	105.7	<b>106.6</b>	n.a.	n.a.	107.1
1982-83 ..	117.0	122.4	118.9	122.7	117.9	<b>120.6</b>	n.a.	118.9	119.3

(a) For definitions, see the section preceding the tables. Base: September Quarter 1981 = 100.0.

## WAGE-FIXING AUTHORITIES

### Tasmanian Industrial Boards

#### History

The evolution of the Tasmanian Wages Boards system is described in the 1968 *Year Book*. On 22 December 1975, Royal Assent was given to the *Industrial Relations Act* 1975. The new Act superseded the *Wages Board Act* 1920, replacing Wages Boards with Industrial Boards; the more important changes embodied in it are outlined in the 1977 *Year Book*. The following sections summarise the current situation.

#### Tasmanian Industrial Boards

The Tasmanian Industrial Boards are the wage-fixing Authorities for all employers whose employees are not covered by Federal or Public Service Board awards (approximately 70 000 employees in this State). The Chairman, Deputy Chairman and Assistant Deputy Chairman of Industrial Boards are Government-appointed and act as chairmen on approximately 70 Tasmanian Industrial Boards. Supporting staff are officers of the Department of Labour and Industry.



### *Establishment and Constitution of Industrial Boards*

Boards are established, by order of the Governor, for particular industries. The constitutional nexus of a Board is the industry of the employer, not the common occupation of the employees, as is the case under other authorities.

Each Board, of which there are about 70 in active existence, consists of an equal number of employer and employee representatives, and a Chairman. The Chairman is the Chairman of Industrial Boards, or at his direction, the Deputy Chairman of Industrial Boards or the Assistant Deputy Chairman. Board members are appointed by the responsible Minister; at least one-half (on either side) of the representatives must be employed in the industry within the Board's jurisdiction.

Board members are appointed to a three-year term of office.

### *Function of Boards*

The function of Industrial Boards is to make awards prescribing minimum wage rates and conditions of employment that must be observed by all employers in the industries within the particular Board's jurisdiction. (An 'Industry' is defined in the Act as any industry, trade, business, undertaking, profession, calling, function, process or work performed, carried on, or engaged in by an employer.) Examples are the Mining (Lead-Zinc) Industrial Board, which is established in respect of the industry of mining and processing of silver-lead-zinc ore; the Dentists' Industrial Board, established in respect of dentists and dental mechanics, and hence covering persons employed in those industries, and the Shipbuilders' Industrial Board, established in respect of the industry of constructing, altering, or repairing ships or boats, and dunnaging of ships' holds.

An award cannot contain any matter relating to: (i) the opening or closing hours of an employer's business premises; (ii) the granting of long service leave; (iii) a bonus payment made at the discretion of an employer; or (iv) a superannuation scheme.

Awards may be made to have retrospective effect, and may be made to remain in force for a specific period. Awards may replace, rescind or amend an existing award, and are subject to the *Apprentices Act* 1942, the *Long Service Leave Act* 1956, the *Public Health Act* 1962, the *Mines Inspection Act* 1968 and the *Industrial Safety, Health and Welfare Act* 1977.

Meetings of Boards are normally convened by the Chairman of Industrial Boards but the responsible Minister (The Minister for Industrial Relations) may convene a Board meeting for the purpose of settling or preventing an industrial dispute.

### *Variations to Awards Without a Meeting of a Board*

Under Section 30 of the Act, the Chairman may make an award amending a previous award, without the convening of a meeting of the Board, upon written application from all representative members of the Board for the particular amendment.

Under Section 31 the Chairman can make a Common Rule Award, where the provisions of at least five awards are affected.

On receipt of an application, a notice is published in the daily press. A hearing is then conducted, at which the submissions of employer and employee organisations are considered by the chairman. Following the hearing, the Chairman may make a Common Rule Award.

This award may only relate to the following matters: (i) a basic wage; (ii) a minimum wage; (iii) standard hours of work; (iv) paid leave of absence; and (v) any matter that is determined in an award made under the *Federal Conciliation and Arbitration Act* 1904 that affects or relates to industries in which at least five Boards have jurisdiction. However, this restriction is removed if the award is made on joint application from the Tasmanian Trades and Labour Council and an appropriate employer organisation (usually the

Tasmanian Chamber of Industries). An example of a Common Rule Award is an award made following a 'National Wage' decision of the Federal Conciliation and Arbitration Commission.

### *Industrial Agreements*

Under Section 32 of the Act, an industrial agreement may be made, for the purpose of resolving an industrial matter that does not extend to the whole of an industry within the jurisdiction of a Board. When the Chairman satisfies himself that the agreement has been executed by, or on behalf of, all parties involved in the matter, and that the provisions of the agreement are in line with appropriate award provisions, the Chairman 'shall certify that agreement as an award having like effect under this Act'.

### *Industrial Appeals Tribunal*

This Tribunal was set up to provide for appeals against a determination made by a Board or the Chairman to include, or refuse to include, any specified provision in any award or to refuse to make an award on any specified matter. Such appeals must be made within 21 days of the making of a determination. After hearing the appeal, the Tribunal (unless it dismisses the appeal) may reverse or vary the determination in respect of which the appeal is brought; and to give effect to its decision the Tribunal may vary or revoke an award, or make a new award.

A decision of the Tribunal can be challenged only on the grounds of illegality, by application to the Supreme Court.

### *Compulsory Conferences*

Under Section 50 of the Act, the Minister may call a compulsory conference for the purpose of settling or preventing an industrial dispute.

The Minister may summons any person whose presence may help prevent or settle a dispute.

The compulsory conference is presided over by a person directed by the Minister to undertake such duty; in practice this person is usually the Chairman, Deputy Chairman or Assistant Deputy Chairman of Industrial Boards.

If after considering the views expressed at the conference the President is of the opinion that certain action should be taken to effect the aim of the conference (viz. to settle or prevent an industrial dispute) then he may, by written order, direct such action to be taken.

## **Tasmanian Public Service Board**

### *General*

The *Public Service Act* 1973 established two new industrial authorities, the Public Service Board and Public Service Arbitrator (for details see the next section) to deal with awards, working conditions, etc., for employees of the State Government and certain State authorities. The Public Service Board comprises three Commissioners appointed by the Governor for terms not exceeding five years. One of the three Commissioners is appointed Chairman of the Board. In addition to members of the State Public Service the Board's jurisdiction includes persons employed in the teaching service, police force, parliamentary staff positions, public hospitals, non-academic staff of the College of Advanced Education and various State authorities.

The Public Service Board Department is the personnel authority for the Public Service and is required to examine the business of each department's activities and business methods to find ways of economising and promoting efficiency in the management and working of departments. The work of the Public Service Board Department, therefore, involves inspections and the recruitment, appointment, salary classification, training and promotion and disciplinary supervision of all persons employed under the *Public Service Act 1973*.

#### *Industrial Functions*

The Public Service Board may make awards covering wages, salaries and conditions of work for employees falling within its jurisdiction. A main function of the Board is determining 'principal awards', i.e. an award which covers all employees within the scope of a particular group such as administrative and clerical officers. The determining of a principal award involves a complete review of the wages and salaries and other work conditions of all positions within the scope of the particular award.

Unless revoked as principal award is effective for three years. However, during the currency of a principal award it may be amended by the Board to eliminate anomalies, errors or defects contained in it, to incorporate determinations of the Federal Conciliation and Arbitration Commission (e.g. national wage case decisions, etc.), or for a number of other reasons.

#### **The Tasmanian Public Service Arbitrator**

The Public Service Arbitrator, appointed by the Governor for a term not exceeding five years, has the same area of jurisdiction as the Public Service Board. Applications to the Arbitrator for arbitration on awards may be made where the Public Service Board has: (i) refused an application for an award; (ii) made an award (including an award to supplement a consent award); or (iii) allowed three months or longer to elapse after an application has been made for an award without (a) refusing the application or (b) making an award (including a consent award). Such applications are lodged with the registrar and the Arbitrator. After he has been satisfied that the applicant is entitled to apply for arbitration, arranges to hear the applicant and others affected by the award. After hearing and considering an application the Arbitrator may: (i) refuse the application; (ii) confirm the award or any of its provisions; (iii) direct the Board to vary the award by omitting, altering or adding to the award's provisions; or (iv) where it has refused or failed to make an award, to make an award in specified terms.

The Public Service Arbitrator has an additional function of reviewing individual salary classifications made by any controlling authority following the handing down of any new principal award. Applications for consideration of particular salary classifications may be made by any registered employee organisation in respect of any office or position held by any of its members. In addition, the *State Employees (Long Service Leave) Act 1950* was amended on 19 September 1974. A new section provided for the settlement of any dispute as to whether or when an employee is or has become entitled to leave of absence or an allowance in lieu, or whether a deceased employee's personal representative is or has become entitled to payment of an allowance. The section stipulates that the Public Service Arbitrator shall hear and determine all such disputes.

#### **INDUSTRIAL DISPUTES**

Statistics of industrial disputes refer only to those involving a stoppage of work of 10 man-days or more. The information is compiled from the following sources: (i) direct from employers and trade unions; (ii) reports from government departments and

authorities; (iii) reports from state and federal industrial authorities; and (iv) information contained in trade journals, newspapers, etc. Particulars of some stoppages are estimated and the following statistics should be regarded as giving only a broad measure of industrial stoppages. The details relating to workers involved, working days lost and estimated loss in wages are in respect of those thrown out of work at the establishments where the stoppages actually occurred, only.

#### Industrial Disputes (a): Tasmania

Year	Disputes no.	Workers involved '000	Working days lost '000	Estimated loss in wages \$'000
1977 .....	39	7.9	26.7	928.0
1978 .....	46	17.1	35.4	1 356.0
1979 .....	53	21.1	59.8	2 276.0
1980 .....	52	9.6	91.5	4 390.0
1981 .....	88	16.9	64.3	3 466.0
1982 .....	48	12.1	61.5	4 162.0

(a) The statistics relate to stoppages involving 10 man-days or more in the establishments where the stoppages occurred, only.

The previous table summarises statistics relating to industrial disputes in Tasmania for the last six years; the next table summarises industrial disputes in Australia:

#### Industrial Disputes (a): Australia

Year	Disputes no.	Workers involved '000	Working days lost '000	Estimated loss in wages \$'000
1977 .....	2 090	596.2	1 654.8	59 674.0
1978 .....	2 277	1 075.6	2 130.8	78 404.0
1979 .....	2 042	1 862.9	3 964.4	148 614.0
1980 .....	2 429	1 172.8	3 320.2	152 022.0
1981 .....	2 915	1 251.8	4 192.2	221 779.0
1982 .....	2 060	722.9	2 158.0	133 625.0

(a) The statistics relate to stoppages involving 10 man-days or more in the establishments where the stoppages occurred, only.

The following table analyses industrial disputes according to the industry of the labour force involved:

#### Industrial Disputes by Industries: Tasmania

Period	Mining	Manufacturing					Total manu- factur- ing	Construc- tion
		Food, beverages, tobacco	Textiles, clothing, foot- wear	Paper and paper products, printing and publish- ing	Metal products, machin- ery and equip- ment	Other (a)		
Number of Disputes								
1977 .....	14	r 1	—	r 2	r 3	3	9	6
1978 .....	15	r 1	—	r 4	4	5	14	3
1979 .....	13	r 1	—	r 3	r 6	r 3	13	3
1980 .....	17	r 5	—	r 2	r 3	r 4	14	1
1981 .....	22	2	—	5	7	2	16	8
1982 .....	8	1	1	5	5	4	16	6

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## Industrial Disputes by Industries: Tasmania—continued

Manufacturing								
Period	Mining	Food, beverages, tobacco	Textiles, clothing, foot- wear	Paper and paper products, printing and publish- ing	Metal products, machin- ery and equip- ment	Other (a)	Total manu- factur- ing	Construc- tion
Workers Involved (Directly and Indirectly) ('000)								
1977 .....	3.1	r 0.1	—	r 0.3	r 0.9	r 0.1	1.4	0.3
1978 .....	3.0	r 1.3	—	r 1.6	r 5.2	r 0.4	8.4	1.3
1979 .....	3.8	r 0.6	0.2	r 1.3	r 4.2	r 0.7	6.9	1.7
1980 .....	5.0	r 1.5	—	r 0.2	r 0.4	r 0.3	2.3	—
1981 .....	5.5	0.1	—	0.9	1.4	—	2.4	2.1
1982 .....	4.0	—	0.1	2.9	1.3	0.4	4.9	0.7
Working Days Lost ('000)								
1977 .....	18.2	r 0.8	—	r 0.2	r 0.9	0.2	2.0	3.0
1978 .....	15.2	r 2.6	—	r 2.1	r 7.5	0.5	12.7	1.3
1979 .....	19.9	r 1.3	0.5	r 5.6	r 15.4	r 1.9	24.7	2.9
1980 .....	70.6	r 4.7	—	r 2.8	r 0.5	r 0.6	8.6	0.1
1981 .....	26.3	1.1	—	2.3	3.3	0.5	7.3	3.8
1982 .....	37.6	0.2	0.7	8.8	2.6	1.4	13.7	6.0
Estimated Loss In Wages (\$'000)								
1977 .....	r 658.9	r 21.7	—	r 5.3	r 28.0	r 8.2	r 63.1	r 110.1
1978 .....	r 668.9	r 77.3	—	r 77.7	r 249.9	r 19.5	r 424.4	r 44.5
1979 .....	r 812.9	r 47.0	r 16.7	r 223.6	r 550.3	r 68.6	r 906.1	r 99.2
1980 .....	3 397.0	r 189.5	—	r 162.3	r 19.9	r 26.8	r 398.5	r 4.7
1981 .....	r 1 580.6	r 50.5	—	r 116.8	r 148.4	r 26.7	r 342.3	r 200.5
1982 .....	2 437.2	9.9	34.6	557.7	158.1	81.9	842.2	565.9
Period	Railway transport, air transport	Water transport		Road transport, other transport and storage, communi- cation	Entertain- ment, recreation, hotels, personal service, etc.	Other industries (b)	Total all industries	
		Steve- doring services	Other water transport					
Number of Disputes								
1977 .....	3	r —	r 2	r 1	1	3	39	
1978 .....	2	r 2	r 1	r 5	1	r 3	46	
1979 .....	3	r 2	r —	r 5	—	r 14	53	
1980 .....	2	1	r 3	r 1	—	r 13	52	
1981 .....	3	3	2	9	—	r 25	88	
1982 .....	2	1	3	5	—	7	48	
Workers Involved (Directly and Indirectly) ('000)								
1977 .....	0.4	r —	r 0.1	r 1.2	1.2	0.2	7.9	
1978 .....	0.3	r 0.8	r —	r 1.6	0.2	r 1.4	17.1	
1979 .....	1.1	r 0.6	r —	r 2.5	0.2	r 4.3	21.1	
1980 .....	0.3	—	r 0.2	r —	—	r 1.6	9.6	
1981 .....	0.4	0.3	—	2.6	—	r 3.5	16.9	
1982 .....	0.3	—	0.1	0.9	—	1.2	12.1	

continued next page

## Industrial Disputes by Industries: Tasmania—continued

Industrial Disputes by Industries: Pakistan - Continued							
Period	Railway transport, air transport	Water transport		Road transport, other transport and storage, communi- cation	Entertain- ment, recreation, hotels, personal service, etc.	Other industries (b)	Total all industries
		Steve- doring services	Other water transport				
Workers Involved (Directly and Indirectly) ('000)							
Working Days Lost ('000)							
1977 .....	0.7	r —	r 0.1	r 0.5	1.2	0.9	26.7
1978 .....	0.6	r 0.8	r —	r 2.1	—	r 2.7	35.4
1979 .....	2.6	r 1.1	r —	r 3.0	0.1	r 5.6	59.8
1980 .....	0.2	—	r 0.2	r —	—	r 11.9	91.5
1981 .....	0.5	0.1	0.2	9.9	—	r 16.1	64.3
1982 .....	0.1	—	0.2	0.3	—	3.4	61.5
Estimated Loss in Wages (\$'000)							
1977 .....	r 34.3	r —	r 4.7	r 17.1	—	r 10.3	r 928.5
1978 .....	r 20.8	r 27.2	r 0.5	r 75.2	r 0.8	r 93.2	r 1 355.6
1979 .....	r 91.2	r 40.2	r —	r 101.3	r 4.2	r 220.6	r 2 275.7
1980 .....	r 6.4	r 0.4	r 11.9	r 0.5	—	r 570.3	r 4 389.6
1981 .....	r 25.1	6.0	r 9.3	r 465.6	—	r 836.6	3 466.0
1982 .....	7.7	1.3	10.2	15.2	—	282.5	4 162.3

(a) Includes: wood, wood products and furniture; chemicals, petroleum and coal products; non-metallic mineral products; miscellaneous manufacturing.

(b) Includes: agriculture, grazing, etc.; finance and insurance; wholesale and retail trade; real estate and business services; electricity, gas and water; public administration and defence; and community services.

## Further References

## ABS Publications

The information contained in this chapter is generally available in the 6000.0 series of publications produced by the Canberra Office of the ABS. The main bulletins of this series are the following:

The Labour Force (6203.0), monthly.

The Labour Force (6204.0), annual.

Average Weekly Earnings (6302.0), quarterly.

Wage Rates (6312.0), monthly.

Industrial Disputes (6322.0), quarterly.

Consumer Price Index (6401.0), quarterly.

Average Retail Prices of Selected Food and Grocery Items, Six State Capital Cities and Canberra (6403.0), quarterly.

Price Index of Materials Used in Building Other than House Building (6407.0), monthly.

Price Index of Materials Used in House Building (6408.0), monthly.

Price Index of Metallic Materials (6410.0), monthly.

Price Index of Materials Used in Manufacturing Industry (6411.0), monthly.

Price Index of Articles Produced by Manufacturing Industry (6412.0), monthly.

Export Price Index (6405.0), monthly.

## Other Publications

COMMISSION OF INQUIRY INTO POVERTY (R. F. Henderson, Chairman). *Poverty in Australia*, Vols. 1 and 2 (AGPS, Canberra, 1975).

DEPARTMENT OF EMPLOYMENT AND YOUTH AFFAIRS. Monthly Review of the Employment Situation.

## CHAPTER 11

### HOUSING AND CONSTRUCTION

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## Chapter 11

### HOUSING AND CONSTRUCTION

#### DWELLING STATISTICS

##### The 1981 Census

Information concerning the housing of the State's population is obtained from householders' schedules collected during population censuses. Statistics on dwellings derived from the 1981 Census of Population and Housing are included in this chapter. For Census purposes, dwellings are divided into two groups, occupied dwellings and unoccupied dwellings. These are defined below:

##### *Definitions*

*Occupied Dwelling:* An *occupied dwelling* is defined as the premises occupied by a household on Census night (for a definition of *household* see below). Occupied dwellings are further classified into the following two categories:

(i) A *private dwelling* is normally a house, room or flat but it can also be a tent, houseboat, or a caravan if standing on its own block of land, and not occupied by members of the same household resident in an adjacent dwelling. It is important to note that the total number of dwellings may be more than the total number of known structures in any given area.

(ii) *Non-private dwellings* are hotels, motels, hostels, boarding houses, gaols, religious and charitable institutions, defence establishments and other communal dwellings. Usually, occupants of such dwellings use communal facilities such as hotel dining rooms or mess halls. A caravan in a caravan park (whether there permanently or temporarily) is treated as part of a non-private dwelling, as are self-contained units provided by commercial enterprises such as hotels, motels or guest houses.

*Unoccupied Dwelling:* An *unoccupied dwelling* is a structure built specifically for living purposes and capable of being lived in, but unoccupied at the time of the Census. Vacant houses, holiday houses, huts, cabins (other than seasonal workers' quarters) and houseboats are therefore counted as unoccupied dwellings; but vacant tents, garages and caravans (if not normally occupied) are not. Only private dwellings can be classified as unoccupied. Unoccupied dwellings include dwellings vacant because they have been newly completed, vacant for demolition or repair, holiday homes, dwellings to let, and dwellings where the household was absent on Census night.

*Household:* For Census purposes, a *household* is a group of people who live together as a single domestic unit and eat together, the food eaten by members being served from a common supply. A person living alone is also a household. It is possible, then, for more than one household to live in one house or structure. For example, a lodger who lives with a family and provides all his food for himself is not a member of the family's household but constitutes a separate household and therefore completes a separate Householder's Schedule.

##### *Distribution of Dwellings*

The following table, shows the distribution of occupied and unoccupied dwellings at 30 June 1976, and 30 June 1981 by local government area:



## Number of Occupied and Unoccupied Private Dwellings at 30 June 1976 and 1981

Local Government Area (Statistical Division and Subdivision in Bold Type)		1976 Census			1981 Census		
		Occupied	Unoccupied	Total	Occupied	Unoccupied	Total
Hobart (H) .....		17 693	1 342	19 035	17 941	1 519	19 460
Glenorchy (H) .....		12 825	556	13 381	13 860	588	14 448
Clarence (H) .....		11 940	866	12 806	13 560	911	14 471
Brighton (H) (S) .....		1 333	40	1 373	2 573	145	2 718
Kingborough (H) (S) .....		4 165	332	4 497	5 422	422	5 844
New Norfolk (H) (S) .....		2 568	181	2 749	2 708	224	2 932
Sorell (H) (S) .....		1 413	1 413	2 826	1 818	1 443	3 261
Bothwell (S) .....		253	669	922	254	842	1 096
Bruny (S) .....		123	303	426	157	348	505
Esperance (S) .....		966	294	1 260	1 005	371	1 376
Glamorgan (S) .....		452	448	900	582	507	1 089
Green Ponds (S) .....		261	23	284	312	22	334
Hamilton (S) .....		953	165	1 118	763	287	1 050
Huon (S) .....		1 385	110	1 495	1 465	102	1 567
Oatlands (S) .....		675	152	827	677	149	826
Port Cygnet (S) .....		617	239	856	732	284	1 016
Richmond (S) .....		523	76	599	600	73	673
Spring Bay (S) .....		541	281	822	619	353	972
Tasman (S) .....		327	458	785	408	528	936
<b>HOBART .....</b>		<b>50 116</b>	<b>4 279</b>	<b>54 395</b>	<b>55 844</b>	<b>4 743</b>	<b>60 587</b>
<b>SOUTHERN .....</b>		<b>8 897</b>	<b>3 669</b>	<b>12 566</b>	<b>9 612</b>	<b>4 375</b>	<b>13 987</b>
Launceston .....		11 297	871	12 168	11 456	918	12 374
Beaconsfield .....		3 768	709	4 477	4 400	746	5 146
Deloraine .....		1 479	231	1 710	1 609	253	1 862
Evandale .....		463	74	537	587	46	633
George Town .....		1 765	524	2 289	2 043	593	2 636
Lilydale .....		2 391	100	2 491	2 664	166	2 830
Longford .....		1 630	150	1 780	1 839	146	1 985
St Leonards .....		5 246	275	5 521	6 237	319	6 556
Westbury .....		1 660	131	1 791	2 079	159	2 238
<b>Tamar .....</b>		<b>29 699</b>	<b>3 065</b>	<b>32 764</b>	<b>32 914</b>	<b>3 346</b>	<b>36 260</b>
Campbell Town .....		495	107	602	496	138	634
Fingal .....		897	305	1 202	974	310	1 284
Flinders .....		303	78	381	344	110	454
Portland .....		567	602	1 169	772	799	1 571
Ringarooma .....		703	165	868	753	145	898
Ross .....		173	72	245	168	81	249
Scottsdale .....		1 226	328	1 554	1 422	317	1 739
<b>North Eastern .....</b>		<b>4 364</b>	<b>1 657</b>	<b>6 021</b>	<b>4 929</b>	<b>1 900</b>	<b>6 829</b>
<b>NORTHERN .....</b>		<b>34 063</b>	<b>4 722</b>	<b>38 785</b>	<b>37 843</b>	<b>5 246</b>	<b>43 089</b>
Burnie .....		5 762	359	6 121	6 382	459	6 841
Circular Head .....		2 197	428	2 625	2 365	455	2 820
Devonport .....		6 565	433	6 998	7 593	510	8 103
Kentish .....		1 166	130	1 296	1 277	123	1 400
King Is. .....		747	122	869	777	114	891
Latrobe .....		1 565	313	1 878	1 754	371	2 125
Penguin .....		1 440	106	1 546	1 601	124	1 725
Ulverstone .....		3 593	325	3 918	4 155	328	4 483
Wynyard .....		3 272	357	3 629	3 682	488	4 170
<b>North Western .....</b>		<b>26 307</b>	<b>2 573</b>	<b>28 880</b>	<b>29 586</b>	<b>2 972</b>	<b>32 558</b>
Gormanston .....		99	29	128	41	1	42
Queentown .....		1 254	127	1 381	1 171	125	1 296
Strahan .....		136	113	249	138	16	154
Waratah .....		497	64	561	547	83	630
Zeehan .....		1 198	205	1 403	1 486	204	1 690
<b>Western .....</b>		<b>3 184</b>	<b>538</b>	<b>3 722</b>	<b>3 383</b>	<b>429</b>	<b>3 812</b>
<b>MERSEY-LYELL .....</b>		<b>29 491</b>	<b>3 111</b>	<b>32 602</b>	<b>32 969</b>	<b>3 401</b>	<b>36 370</b>
<b>TASMANIA .....</b>		<b>122 567</b>	<b>15 781</b>	<b>138 348</b>	<b>136 268</b>	<b>17 765</b>	<b>154 033</b>

## BUILDING STATISTICS

### Scope

The scope of building statistics is restricted to building work in the creation of or significant alteration or addition to structures designed to house people, plant, machinery, vehicles, etc. An alteration or addition is regarded as significant if it is valued on completion at \$10 000 or more. Construction work such as the building of railways, bridges, earthworks, water storages, piers, wharves, etc. is excluded.

When a dwelling is attached to a new building, the whole unit, both in regard to number and value, is classified according to the type of new building (e.g. a new shop and dwelling is classified simply as a shop). Figures for other dwellings include 'home units' but not conversions of existing buildings into flats. Number of 'other dwellings' refers to the number of new individual dwelling units (e.g. one block of flats containing 10 separate flat units would be counted as 10 dwellings).

Details obtained from public authorities on their construction programs and from building contractors refer to all parts of the State. Details for owner-builders cover only those areas subject to building control by local government authorities; thus some farm buildings are excluded but this does not materially affect the figures.

### Source of Data

The main statistics relate to building approvals and to building operations (commencements, completions, etc.). The data are derived as follows:

*Building Approvals:* These comprise: (i) approvals by local government authorities for the construction of private buildings; and (ii) contracts let and day labour projects commenced by public authorities. Details are compiled monthly.

*Building Activity:* Returns are obtained from: (i) building contractors engaged in the erection of new buildings; (ii) owner-builders; and (iii) federal, state, local and semi-government authorities. Statistics are compiled at quarterly intervals. From 1980-81 a new quarterly Building Activity Survey replaced the previous quarterly operations census. The difference in concept and comparability of data between the two collections are only minor.

### Definitions

*A Dwelling:* is classified as either a 'House' or an 'Other Dwelling':

- (i) a 'House' is defined as a building which has been designed or adapted so that its prime purpose is to be a single self-contained (i.e. including bathing and cooking facilities) dwelling unit which is completely detached from other buildings, and occupies (except in such cases as dwellings built for employees or families of the owner or lessee of the land) a separate titled block of land;
- (ii) an 'Other Dwelling' is defined as a self-contained dwelling unit other than a house as defined in (i) above. These include flats, home units, semi-detached dwellings, villa units, town houses, etc.

*Contractor-built Houses:* Those erected under contract, or in anticipation of sale or rental.

*Owner-built:* An 'owner-built' house is one erected by the owner, (other than a recognised building contractor) or under his direction, without the services of a single contractor responsible for the whole job. Houses built by businesses (other than recognised building contractors) are also included in this category.

*Commenced:* A building is regarded as having commenced in a particular quarter when the value of work done on that job to the end of the quarter is first reported to be equal to or greater than the following threshold values:

- (i) for house jobs (including alterations and additions to houses), \$2 000;
- (ii) for other dwelling and other building jobs (including alterations and additions to other dwellings and other buildings), \$5 000.

However where advice has been received from the relevant authority that a first inspection has been made on a particular building job, that job is regarded as having commenced even though the value of work reported by the builder as having been done to the end of the quarter is below the threshold.

*Under Construction:* A building is regarded as being under construction at the end of a period if it has been commenced but has not been completed, and work on it has not been abandoned.

*Value of Building:* Approved, commenced, completed, or under construction represents the estimated value of the whole job when completed, *excluding* the value of the land on which the job is carried out. Site preparation costs are included.

*Value of Building Work Done:* Represents the estimated value of the building work actually carried out during the period.

All values shown are *current values*, i.e. no adjustment has been made for the substantial rise in building costs over recent years. Some perspective to the increases in values can be gained from the wholesale price indexes of materials used in house building and of materials used in building other than house building for Hobart, and from increases in average weekly earnings per employed male unit for Tasmania (see table and graphs appearing later in this Chapter).

### Building Approvals

The following two tables show details of building approvals; a distinction is made between 'private' and 'public' and the information is dissected to give separate figures for statistical divisions. In 1982-83, 43 per cent of the total value of building approvals was attributed to the Hobart Division, 7 per cent to the Southern Division, 26 per cent to the Northern Division, and 24 per cent to the Mersey-Lyell Division.

Building Approvals, by Statistical Division, 1982-83

Particulars	Hobart	Southern	Northern	Mersey-Lyell	Total Tasmania
<i>Number</i>					
New dwellings—Private .....	705	303	635	361	2 004
Public .....	217	11	191	304	723
Total .....	922	314	826	665	2 727
<i>Value (\$'000)</i>					
New dwellings—Private .....	28 015	8 212	22 737	14 348	73 313
Public .....	7 200	296	4 910	7 830	20 236
Alterations and additions to dwellings (a)—Private .....	3 896	741	1 550	1 443	7 630
Public .....	—	—	23	—	23
Other building—Private .....	16 227	927	6 192	5 018	28 364
Public .....	15 350	1 052	7 619	9 858	33 878
All buildings—Private .....	48 139	9 880	30 480	20 809	109 307
Public .....	22 549	1 348	12 552	17 688	54 137
Total .....	70 688	11 228	43 031	38 497	163 444

(a) Valued at \$10 000 and over.

**Building Approvals, Tasmania**

<i>Particulars</i>	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Number</i>						
New dwellings—Private .....	2 757	2 811	2 639	2 459	2 165	2 004
Public .....	932	833	676	741	565	723
Total .....	3 689	3 644	3 315	3 200	2 730	2 727
<i>Value (\$'000)</i>						
New dwellings—Private .....	78 136	83 508	81 872	82 657	75 298	73 313
Public .....	17 961	17 700	16 772	19 048	15 038	20 236
Alterations and additions to dwellings (a)—Private .....	4 817	5 077	5 828	6 920	7 766	7 630
Public .....	—	12	—	30	20	23
Other building—Private .....	41 623	30 943	56 931	45 384	47 527	28 364
Public .....	45 192	46 176	34 510	27 806	42 844	33 878
All building—Private .....	124 576	119 527	144 631	134 961	130 591	109 307
Public .....	63 153	63 889	51 282	46 884	57 902	54 137
Total .....	187 729	183 416	195 912	181 845	188 493	163 444

(a) Valued at \$10 000 and over.

**Building Construction***Houses Constructed*

The next table shows details of the number and value of houses commenced, completed and under construction for recent years:

**Construction of New Houses, Tasmania**

<i>Year</i>	<i>Commenced</i>		<i>Completed</i>		<i>Under construction at end of year</i>	
	<i>Number</i>	<i>Value (a)</i>	<i>Number</i>	<i>Value (a)</i>	<i>Number</i>	<i>Value (a)</i>
		<i>(\$m)</i>		<i>(\$m)</i>		<i>(\$m)</i>
1977-78 .....	2 688	77.5	2 833	82.6	1 615	46.0
1978-79 .....	2 889	88.7	2 617	80.7	1 885	59.3
1979-80 .....	2 395	77.4	2 721	87.2	1 487	49.3
1980-81 .....	2 450	87.5	2 510	88.7	1 220	44.6
1981-82 .....	1 940	70.7	2 010	74.3	1 050	39.0
1982-83 .....	1 690	64.4	1 580	60.0	1 120	42.6

(a) When completed.

The following table shows, for Tasmania, the number of houses built by the public sector for recent years, and distinguishes between those built for public authorities (all types) and those built for private persons:

**Number of New Houses Completed for Public Authorities and Private Persons, Tasmania**

<i>Year</i>	<i>For public authorities</i>	<i>For private persons</i>	<i>Total</i>	<i>Year</i>	<i>For public authorities</i>	<i>For private persons</i>	<i>Total</i>
1977-78 .....	601	2 232	2 833	1980-81 .....	450	2 060	2 510
1978-79 .....	542	2 075	2 617	1981-82 .....	352	1 660	2 010
1979-80 .....	479	2 242	2 721	1982-83 .....	270	1 310	1 590

The principal construction authority in Tasmania is the Housing Division of the State Department of Housing and Construction but 'houses built for public authorities' include construction by, or for, other State and Federal Government departments, instrumentalities, etc.

### *Government Dwelling Construction*

The Housing Department administers that portion of the *Homes Act* 1935 which relates to the purchase and development of land for housing and the erection of homes for rental and sale. These were initially functions of the Housing Division of the Agricultural Bank of Tasmania but in 1953 a separate Housing Department was established. The Department of Housing and Construction was established in 1977 combining the Housing and Construction Departments. In 1983 the necessary legislation was passed by Parliament to enable the establishment of a separate Housing Department.

The following table shows the aggregate dwellings completed by the State Housing Authority in Tasmania to 30 June 1983:

**Aggregate Dwellings Completed by State Housing Authorities in Tasmania,  
to 30 June 1983**

Type of Dwelling	Bed-sitting room	One bedroom	Two bedrooms	Three bedrooms	Total
Houses (a) .....	—	2	732	17 463	18 197
Multi-unit flats .....	1	151	181	27	360
Elderly persons' housing .....	454	1 313	—	—	1 767
Other medium density .....	—	49	901	131	1 081
Movable (granny) units .....	—	29	—	—	29
<b>Total dwellings .....</b>	<b>455</b>	<b>1 544</b>	<b>1 814</b>	<b>17 621</b>	<b>21 434</b>

(a) Includes seven houses used for community activities.

Until the 1970's the dwellings constructed were predominantly detached, three bedroom houses but in more recent years there has been a marked increase in the construction of other dwellings including elderly persons' homes. In 1968-69, for example, the Housing Department completed 604 dwellings, all of which were detached houses. In 1982-83, on the other hand, the Housing Department completed 556 dwellings comprising 236 houses, 242 elderly persons' homes and 78 other medium density dwellings.

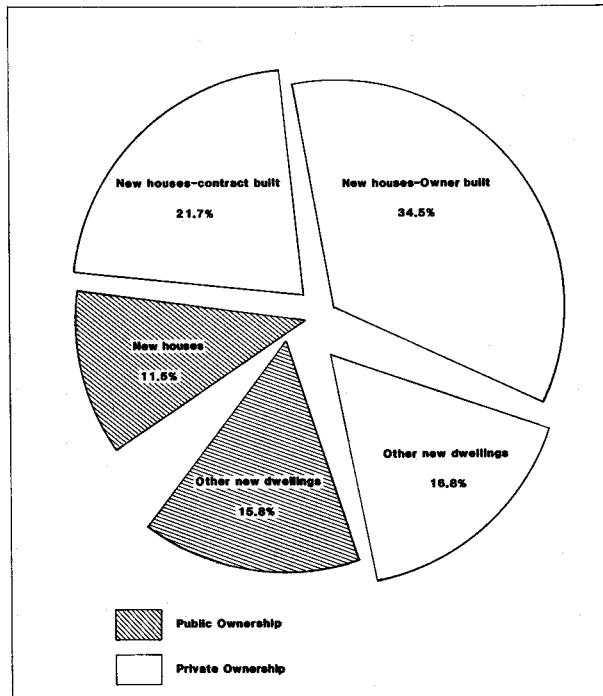
During 1982-83 the Housing Department continued to reduce outer-suburban housing developments with a corresponding increase in urban infill construction. The Department also began a spot purchase program whereby privately built dwellings are purchased to form part of the Department's dwelling stock. This program will result in the purchase of approximately 100 dwellings in 1983-84.

### *Construction of New Houses and Other New Dwellings*

The figures on dwelling construction for recent years show an increasing proportion of new dwellings in the form of flats, units, etc. In 1982-83, 'other new dwellings' comprised 28 per cent of the total number of dwellings completed compared to only 15 per cent in 1969-70.

The pie chart which follows shows the number of new houses and other new dwellings completed, dissected by type of ownership, as a proportion of the total number of dwellings completed:

**New Dwellings Completed, Tasmania, 1982-83**  
(Proportion of Total Number)



In the following table, details are given of completions of new houses and other new dwellings for recent years:

New Houses and Other New Dwellings Completed, Tasmania						
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Number						
New houses—						
Public ownership—						
Contract-built .....	342	221	247	176	171	149
Day labour .....	259	321	232	274	181	121
Private ownership—						
Contract-built .....	973	987	1 016	1 210	790	510
Owner-built .....	1 259	1 088	1 226	850	860	810
Total houses (a) .....	2 833	2 617	2 721	2 510	2 010	1 580
Other new dwellings (b) .....	1 052	875	882	993	734	765
Total houses and other dwellings (c) .	3 885	3 492	3 603	3 500	2 740	2 350
Value (\$'000)						
New houses .....	82 565	80 718	87 189	88 700	74 300	60 000
Other new dwellings .....	23 136	18 742	19 264	22 875	19 109	18 966

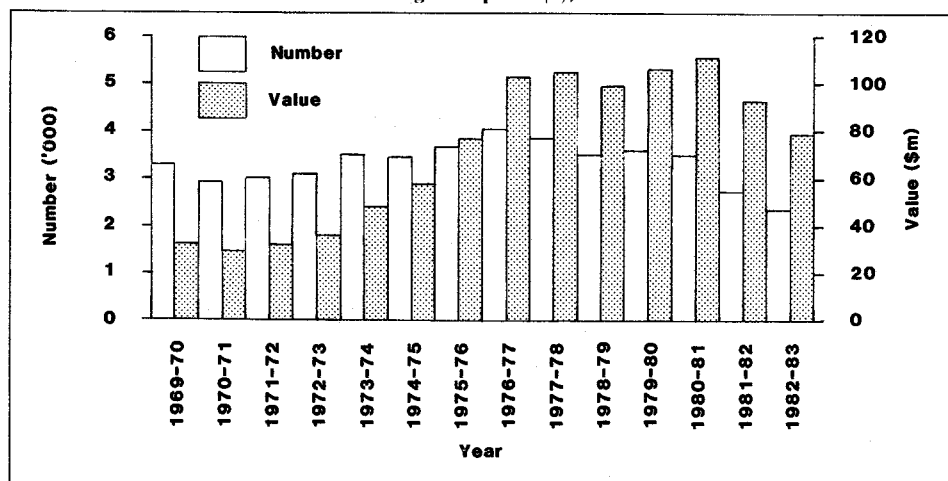
(a) From 1980-81 'Total houses' is rounded to the nearest ten units.

(b) Individual dwelling units.

(c) From 1980-81 'Total houses and other dwellings' is rounded to the nearest ten units.

The following graph shows the number and value of new dwellings completed from 1968-69 to 1982-83. As noted earlier, all values shown in this section are *current values*.

New Dwellings Completed (a), Tasmania



(a) Alterations and additions valued at \$10 000 or more are included to 1972-73 but excluded from 1973-74.

The following three tables show the value of all buildings completed by ownership and class of building:

Value of all Buildings Completed:  
Private Ownership by Type, Tasmania  
(\$'000)

Type of Building	1977-78	1978-79	1979-80	1980-81(a)	1981-82	1982-83
New houses .....	70 227	68 450	76 287	75 000	64 600	52 000
Other new dwellings .....	17 615	13 277	11 417	14 032	11 626	10 261
Total new dwellings .....	87 842	81 727	87 703	89 000	76 200	62 200
Alterations and additions to dwellings (b) .....	4 232	4 776	5 356	6 700	8 300	8 500
Hotels, etc. ....	5 528	6 436	4 653	2 799	18 934	891
Shops .....	11 754	7 155	14 787	26 927	9 694	11 383
Factories .....	5 500	7 299	5 809	12 115	4 828	4 492
Offices .....	4 481	7 599	5 757	3 390	7 466	8 190
Other business premises .....	3 942	5 021	3 269	7 318	6 303	2 428
Education .....	3 178	1 515	1 029	2 061	1 434	4 193
Religion .....	1 532	910	627	1 075	981	972
Health .....	319	377	4 007	1 100	143	166
Entertainment and recreation ..	1 505	1 675	3 076	3 432	2 789	3 130
Miscellaneous .....	2 041	840	1 693	2 182	3 198	1 387
Total other building .....	39 781	38 827	44 706	62 397	55 768	37 231
Total all building .....	131 854	125 330	137 765	158 000	140 300	108 000

(a) From 1980-81, figures shown for the value of new houses, total new dwellings, alterations and additions and total all building have been rounded to the nearest \$100 000.

(b) Valued at \$10 000 and over.

**Value of Buildings Completed: Public Ownership by Type, Tasmania**  
(\\$'000)

Type of building	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
New houses .....	12 337	12 268	10 902	13 720	9 746	8 051
Other new dwellings .....	5 522	5 464	7 847	8 843	7 483	8 704
Total new dwellings .....	17 859	17 732	18 749	22 564	17 229	16 756
Alterations and additions to dwellings (a) .....	—	—	113	—	42	23
Hotels, etc. ....	—	1 028	—	123	—	—
Shops .....	224	—	—	—	10	67
Factories .....	375	305	217	62	889	1 690
Offices .....	7 170	5 389	12 047	6 080	6 501	14 144
Other business premises .....	533	1 980	7 681	7 798	3 014	3 234
Education .....	23 934	11 729	14 070	16 588	17 381	9 760
Religion .....	—	—	53	—	—	—
Health .....	6 035	899	17 993	4 645	1 768	32 285
Entertainment and recreation .	1 088	2 465	2 960	1 762	1 934	1 763
Miscellaneous .....	3 946	7 570	5 985	16 659	2 353	2 402
Total other building .....	43 306	31 365	61 006	53 718	33 849	65 345
Total all building .....	61 165	49 097	79 868	76 282	51 120	82 125

(a) Valued at \$10 000 and over.

**Value of all Building Completed: Total by Type, Tasmania**  
(\\$'000)

Type of building	1977-78	1978-79	1979-80	1980-81(a)	1981-82	1982-83
New houses .....	82 565	80 718	87 189	88 700	74 300	60 000
Other new dwellings .....	23 136	18 742	19 264	22 875	19 109	18 966
Total new dwellings .....	105 701	99 460	106 452	111 600	93 500	79 000
Alterations and additions to dwellings (b) .....	4 232	4 776	5 469	6 700	8 400	8 500
Hotels, etc. ....	5 528	7 464	4 653	2 922	18 934	891
Shops .....	11 979	7 155	14 787	26 927	9 704	11 450
Factories .....	5 875	7 604	6 026	12 176	5 718	6 181
Offices .....	11 652	12 988	17 804	9 470	13 967	22 334
Other business premises .....	4 475	7 001	10 949	15 116	9 317	5 664
Education .....	27 112	13 244	15 099	18 649	18 815	13 952
Religion .....	1 532	910	680	1 075	981	972
Health .....	6 354	1 275	22 000	5 745	1 910	32 451
Entertainment and recreation .	2 593	4 140	6 036	5 194	4 722	4 893
Miscellaneous .....	5 988	8 410	7 678	18 841	5 552	3 790
Total other building .....	83 087	70 192	105 711	116 115	89 618	102 575
Total all building .....	193 019	174 427	217 633	234 400	191 400	190 100

(a) From 1980-81, figures shown for the value of new houses, total new dwellings, alterations and additions, and total all building have been rounded to the nearest \$100 000.

(b) Valued at \$10 000 and over.

The following table gives details of the total value of all building commenced, completed and under construction for recent years. The items included under 'all building' are specified in the previous two tables.



**Value (When Completed) of All Building, Tasmania  
(\$m)**

Year	Com- menced	Com- pleted	Under construc- tion (a)	Year	Com- menced	Com- pleted	Under construc- tion (a)
1977-78 .....	192.3	193.0	161.3	1980-81 .....	209.4	234.4	166.7
1978-79 .....	211.4	174.4	206.9	1981-82 .....	181.6	191.4	154.5
1979-80 .....	178.6	217.6	179.5	1982-83 .....	159.5	190.1	120.7

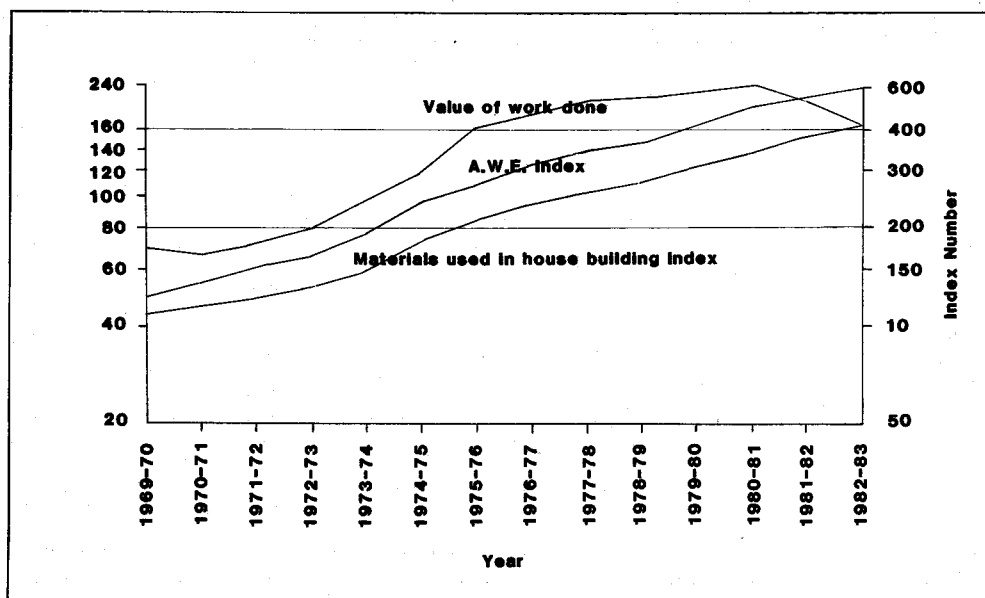
(a) At end of period.

#### *Value of Work Done and Changes in Construction Costs*

The *value of building work done* represents the estimated value of the building work actually carried out during the periods shown.

As pointed out in the section 'Definitions' all values shown relating to building jobs are *current values* only; no attempt has been made to adjust values to a constant prices basis which would allow for increases in construction costs over the periods shown. The following graph and the next table include details of the relevant wholesale price indexes (for Hobart) and of average weekly earnings per employed male unit for Tasmania, which give some perspective to the trends shown in the building value series. In the semi-logarithmic graph, equal rates of change (compound percentage rates of growth) are represented by lines of the same angle of slope to the horizontal axis. Therefore, this graph enables ready comparison between the respective rates of growth of the value of building work done and the two indexes shown.

**Value of all Building Work Done, Tasmania, Wholesale Price Index of Materials Used in House Building (a) and Average Weekly Earnings Index (b)  
(Semi-logarithmic (Ratio) Scale Graph)**



(a) All groups, Hobart; base year 1966-67 = 100.00.

(b) Average weekly earnings per employed male unit for Tasmania adjusted to the base: year 1966-67 = 100.0.

## Value of Building Work Done, Tasmania, Wholesale Price Indexes and Average Weekly Earnings

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82(f)	1982-83(f)
Value of work done—						
New houses .....\$'000	81 487	87 079	84 216	88 800	73 700	61 700
Other new dwellings ...\$'000	22 501	17 344	18 204	23 182	20 698	16 008
Total new dwellings \$'000	103 988	104 424	102 420	112 000	94 400	77 800
Alterations and additions to dwellings .....\$'000	4 584	5 404	5 451	8 100	9 000	7 200
Other building .....\$'000	90 009	90 989	109 510	118 491	85 771	80 399
Total building .....\$'000	198 581	200 816	217 382	238 500	189 100	165 300
Percentage increase (a) ...	+11.8	+1.1	+8.2	+9.7	-20.7	-12.6
Wholesale price index—						
Materials used in house building—						
Index number (b) .....	256.7	273.6	304.2	338.2	371.7	406.5
Percentage increase (a) ....	9.2	6.6	11.2	11.2	9.9	9.4
Materials used in building other than house building—						
Index number (c) .....	84.1	89.6	100.0	111.6	122.9	136.3
Percentage increase (a) ....	8.1	6.5	11.6	11.6	10.1	10.9
Average weekly earnings (d)—						
Amount .....\$	199.00	211.60	237.90	270.90	284.90	322.30
Expressed as index to base 1966-67 = 100.0 (e) .....	340.2	361.7	406.7	463.1	528.7	598.1
Percentage increase (a) ...	9.8	6.3	12.4	13.9	14.1	13.1

(a) Over previous year.

(b) All groups, Hobart; base year 1966-67 = 100.0.

(c) All groups, Hobart; base year 1979-80 = 100.0. Index numbers prior to 1979-80 are derived from an earlier index series with base year 1966-67 = 100.0.

(d) Per employed male unit, Tasmania. Includes earnings of salaried employees, overtime earnings, over-award and bonus payments, etc., in addition to wages at award rates.

(e) Average weekly earnings per employed male unit for Tasmania in 1966-67 were \$58.50.

(f) Average weekly earnings of all male employees based on the new quarterly survey of earnings and not strictly comparable with the payroll tax based series. The index numbers and percentage changes shown are estimated by linking the two series at September quarter 1981.

## FINANCIAL ASSISTANCE FOR HOUSING

## The State Housing Department

## General

Capital funds for Government home construction in Tasmania are made available by way of allocations from the State Loan Fund, advances and grants under the Commonwealth-State Housing Agreement 1981 and for calendar year 1983 additional funds were made available from the *Special Employment-related Program Act 1982*.

The first Commonwealth-State Housing Agreement was entered into in November 1945. Under this agreement Tasmania received \$5 670 000 which it re-paid upon withdrawing from the scheme in August 1950. The State continued to build houses from its own resources until 1956 when it entered into a new agreement with the Commonwealth. This was renewed with minor modifications in 1961 and 1966. By 30 June 1971

Tasmania's aggregate advances under the scheme were \$89 477 000. In 1971-72 and 1972-73 funds for State housing were provided from the State Loan Fund. Under the Commonwealth-State Housing Agreement of 1973, however, the pre 1971-72 situation was effectively restored with the Commonwealth again providing advances to the States for housing purposes. There were further Housing Agreements in 1978 and 1981. The enabling Commonwealth legislation for these are the *Housing Assistance Acts* 1978 and 1981.

Under the 1978 Agreement the Federal Minister, in consultation with the State Minister, decided the proportion of total money to be used for home purchase assistance and rental assistance. The *Housing Assistance Act* also covered special grants for aged persons' and housing for other persons in need. Grants for Aborigines were introduced in 1979-80.

Under the 1981 Agreement, interest payable to the Commonwealth on rental assistance loans was reduced from 5 per cent to 4.5 per cent. The Agreement provides that funds supplied to the States shall, in the year commencing 1990 be allocated to the States on a per capita basis. Allocations in the preceding years, commencing in 1981-82, shall progress towards that apportionment.

A scheme, jointly funded by both State and Commonwealth sources, to provide financial assistance to low income earners either renting or purchasing their home in the private sector commenced during 1982-83. Assistance to private renters is administered by the Housing Department and to private mortgagors by the Agricultural Bank of Tasmania. The allocation to the Housing Department for this purpose in 1983-84 is \$570 000.

Funds supplied to the Housing Department under the Commonwealth-State Housing Agreement, *Special Employment-related Programs Act* and the State Loan Fund, 1981-82 to 1983-84 were as follows:

Funds for State Government Housing (S'000)			
Source	1981-82	1982-83	1983-84
Commonwealth-State Housing Agreement —			
Advances (Rental Housing Loans) .....	5 464	7 896	5 876
Rental Housing Grants .....	2 570	4 556	10 961
Pensioner Grants .....	992	1 009	866
Aboriginal Grants .....	527	518	696
Servicemen .....	75	19	
Special Employment-related Program .....	..	1 185	1 659
Total Commonwealth Funding .....	9 628	15 183	20 058
State Loan Fund .....	10 950	12 865	13 000
Total .....	20 578	28 048	33 058

The Department obtains funds from various other sources including sales of rental dwellings and sales of surplus land.

#### Agricultural Bank of Tasmania—Home Purchase Assistance

Until 1984 the Agricultural Bank of Tasmania was responsible for the administration of funds made available for home purchase assistance under the *Housing Assistance Act* 1981. The new Housing Agreement operating from 1 July 1981 consolidated all past agreements. The State has also provided State Loan Funds for lending under the *Homes Act* 1935.

Interest rates vary from 6 per cent to 12.5 per cent, and as with the term are variable according to need. The Agreement has the following aims:

- (i) to facilitate home ownership for those able to afford it but not able to gain it through the private market;
- (ii) to provide assistance for home ownership in the most efficient way and thus exclude from eligibility those not in need and minimise continued availability of assistance to those no longer in need. This is to involve provision of assistance that is related to particular recipients' current economic and social circumstances;
- (iii) to enable the states to exercise maximum autonomy and flexibility in the administrative arrangements necessary to achieve (i) and (ii), above.

The following table shows details for recent years:

Agricultural Bank of Tasmania—Advances for Housing (a)						
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Advances approved—						
Number .....	366	350	281	386	354	450
Value (\$'000) .....	8 354	7 532	6 551	10 128	9 448	12 665
Advances outstanding (b)						
(\$'000) .....	43 726	49 187	52 740	58 254	65 056	71 020

(a) Excludes advances to building societies.

(b) At end of period.

The Agricultural Bank also administers the allocation of advances to Co-operative Housing Societies; details of such advances and of the Co-operative Housing Societies appear in Chapter 18, 'Private Finance'.

### Defence Service Homes Corporation

The *Defence Service Homes Act* 1918 assists certain former and serving members of the Defence Force to acquire a home on concessional terms.

The Defence Service Homes Corporation is, subject to the directions of the Minister for Veterans' Affairs, responsible for the administration of the *Defence Service Homes Act*.

Persons eligible for assistance under the Act include members of the Australian forces and nursing services enlisted or appointed for or employed on active service outside Australia or on a ship of war during the 1914-18 and 1939-45 wars; persons who served in the warlike operations in Korea or Malaya or who have served on 'special service' as defined in the *Repatriation (Special Overseas Service) Act* 1962; national servicemen who completed their service on or after 7 December 1972; members of the Defence Force who enlisted before 17 August 1977 and served on continuous full-time service, not being service that ended before 7 December 1972, and completed three years effective full-time service; and members of the Defence Force who enlisted on or after 17 August 1977, and who complete six years effective full-time service and enter into a commitment to render further full-time service and who meet certain prescribed conditions. The categories of eligible persons also include the widows and, in some circumstances, the widowed mothers of eligible persons and persons domiciled in Australia and employed in certain sea-going service during the 1914-18 and 1939-45 wars.

The following loan conditions applied to 30 November 1983:

- Maximum loan : \$25 000;
- Interest rates : 3.75 per cent per annum on the first \$12 000, 7.25 per cent per annum on any excess over \$12 000 up to \$15 000, and 10 per cent per annum on any excess over \$15 000;
- Maximum term : The maximum term permitted by the Act is 45 years or, in the case of the widow or widowed mother of an eligible person, 50 years; but, normally, the repayment period is limited to 32 years.

### *Operations under the Defence Service Homes Act*

Since the inception of the Defence Service Homes Scheme in 1919, 9541 loans have been granted in Tasmania to persons eligible for assistance under the Act.

The following table gives details of the operations under the *Defence Service Homes Act* in recent years:

**Defence Service Homes Corporation: Summary of Operations, Tasmania**

Year	Number of Loans Granted				Total	Capital Expendi- ture \$'000	Loan repay- ments \$'000	Number of loan accounts
	Construc- tion of homes	Purchase of new homes	Purchase of previously occupied homes	Enlarge- ment of existing homes				
1978-79 .....	21	8	71	2	102	1 467	1 951	4 152
1979-80 .....	26	6	74	1	107	1 508	1 951	4 006
1980-81 .....	41	3	86	1	131	2 396	1 833	3 910
1981-82 .....	38	16	140	4	198	4 362	2 013	3 876
1982-83 .....	43	4	134	4	185	4 001	2 891	3 818

### **Home Savings Grant Scheme and Home Deposit Assistance Scheme**

Legislative authority for payment of grants to eligible first home buyers commenced with the *Home Savings Grant Act* 1964. This Scheme provided for grants of up to \$750 to persons who acquired their first home on or after 2 December 1963 and no later than 31 December 1976.

On 1 January 1977, a replacement scheme, the *Home Savings Grant Act* 1976, commenced. This scheme provided for payment of grants of up to \$2 000 for homes acquired from the commencement date of the scheme, up to and including 2 June 1982.

The Home Deposit Assistance Scheme was announced on 18 March 1982, and ran in parallel with the *Home Savings Grant (1964 and 1976) Acts*, until termination of these schemes on 2 June 1982.

The Home Deposit Assistance Scheme provided for a grant of up to \$2 500 for first homes acquired between 18 March 1982 and commencement of the First Home Owners Scheme, 1 October 1983.

### **First Home Owners Scheme**

The First Home Owners Scheme, established by the *First Home Owners Act* 1983, enables persons buying or building their first home on or after 1 October 1983, to qualify for a tax-free benefit. The objectives of the scheme are to help people achieve greater borrowing capacity, aid low income families who cannot bridge the deposit gap and thus have difficulty qualifying for a loan, and provide assistance with repayments during the difficult first five years of home ownership.

There is no restriction on the age or marital status of applicants. However, the benefit does not become payable until an applicant (or in the case of a joint application, at least one applicant) attains Australian citizenship or the right to permanent residence in Australia. The benefit cannot be paid if an applicant has already been paid a Home Savings Grant, or a Home Deposit Assistance Grant.

Benefits provided under the First Home Owners Scheme are income-tested. The income test applies to the taxable income of an applicant, or if more than one applicant, to their combined taxable income, for the last full financial year preceding home purchase. A full grant is payable where taxable income is \$24 300 or less for the financial year 1982-83. The grant is reduced for taxable incomes above \$24 300, reducing to zero at \$27 900. A special income test may apply if income in the financial year of home acquisition is or is likely to be less than the previous year.

Successful applicants have a choice of three options for payment, as listed below:

<i>Benefit options</i>	<i>No dependants</i>	<i>One dependant</i>	<i>Two or more dependants</i>
Option 1— Subsidy only	\$5 000	\$6 500	\$7 000
Option 2— Subsidy	\$3 000	\$4 500	\$4 500
Lump Sum	\$1 500	\$1 500	\$2 000
Option 3— Subsidy	\$1 750	\$2 750	\$2 750
Lump Sum	\$2 500	\$3 000	\$3 500

NOTE: These figures are the maximum benefit paid where income is under the lower limit of \$24 300.

### Housing Loans Insurance Corporation

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act* 1965 to administer the Federal Government's Housing Loans Insurance Scheme under which approved lenders may be insured against losses arising from the making of housing loans. An amendment to the Act in 1977 broadened the scope of the Corporation's activities and, in addition to loans for the purchase or construction of homes for owner occupancy, loans for the purchase of vacant land and commercial housing propositions became insurable. The Act was further amended in 1983 to permit the Corporation to insure loans for the purchase, construction and improvement of commercial buildings and structures.

Owner occupancy loans are insurable without limit on loan amount, interest rate or term. Loans for the purchase of vacant land are insurable where the borrower intends to erect his home at a later date. In the commercial field loans for rental housing ranging from single houses or home units to multi-storey structures, together with loans for the purchase and development of land and the building of project housing including home units, are acceptable.

A once only premium is charged by the Corporation at the time a loan is made. With owner occupancy loans comprising 94 per cent and 95 per cent of the valuation of a home the premium is 1.4 per cent of the amount of the loan. Loans from 95 per cent to 100 per cent of valuation carry a loading of 10 per cent on the 1.4 per cent rate. On loans of less than 94 per cent of valuation, the premium falls progressively to 0.1 per cent on loans for less than 76 per cent of valuation. Premium rates for the purchase of vacant land are as for home ownership and attractive rates apply to commercial loans.

The Corporation will insure a loan made to enable a borrower to buy or build a house, to buy a home unit, or to discharge an existing mortgage. Loans for alterations and extensions and loans to meet expenses of providing or improving lighting, sewerage, drainage, fences, roads, etc. are also insurable. In addition to loans secured by a registered first mortgage, there is provision for the insurance of second mortgage loans and cover is available for either full-term, fixed-term or five-year loans.

The following table shows the number of loans insured, their purpose and amount, during the past three years:

**Housing Loans Insurance Corporation  
Loans Insured in Tasmania**

<i>Purpose of loan</i>	<i>1980-81</i>		<i>1981-82</i>		<i>1982-83</i>	
	<i>Number</i>	<i>Amount (\$'000)</i>	<i>Number</i>	<i>Amount (\$'000)</i>	<i>Number</i>	<i>Amount (\$'000)</i>
Housing—						
Building a new house .....						
Purchase of—						
New house .....	49	1 500	26	800	46	1 500
Established house .....	782	19 600	518	13 000	1 096	26 100
Discharge of mortgage .....	53	1 200	31	700	61	2 000
Home Units .....	32	800	16	400	27	700
Total .....	916	23 100	591	14 900	1 230	30 300

## CONSTRUCTION INDUSTRY STATISTICS

### Commonwealth Department of Housing and Construction

The Department of Housing and Construction provides the Commonwealth Government with policy advice relating to housing and the building industry, monitors changes in these areas and administers the Commonwealth home purchase assistance programs.

The Department is also the Commonwealth Government's main construction agency and as such is involved in the forward planning, design, construction and maintenance of buildings and major engineering facilities for Commonwealth Departments and statutory authorities.

Its national works vary widely in scope and diversity extending from multi-million dollar airports and defence bases to small everyday repairs. In between is a wide range of projects which make a significant contribution to Australia's progress and meet essential needs such as health facilities, scientific laboratories, telephone exchanges and post offices.

*Construction projects, 1983:* Projects under construction during 1983 included the erection of the Commonwealth Courts Building in Hobart (estimated cost \$12.5 million) and the erection of a laboratory complex for the Division of Fisheries and Oceanography in Hobart (estimated cost \$13 million). These projects are both scheduled for completion in mid 1984.

### Further References

*ABS Publications produced by the Tasmanian Office*

Building and Related Statistics, Tasmania (8780.6), annual.

Building Approvals, Tasmania (8731.6), monthly.

Building Activity, Tasmania (8752.6), quarterly.

Estimated Population of Local Government Areas in Tasmania (3201.6), annual.

Dwelling Unit Commencements reported by Approving Authorities, Tasmania (8741.6), monthly.

*ABS Publications produced by the Canberra Office*

Building Activity Australia (8705.0), quarterly.

Summary Characteristics of Persons and Dwellings, Tasmania (2204.0).

Private Sector Construction Establishments, Tasmania, 1978-79 (8720.0).

Construction Activity in the Public Sector, Australia, 1978-79 (8712.0).

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## Chapter 12

### AGRICULTURE

#### THE AGRICULTURAL INDUSTRY

##### General

The Tasmanian rural economy is marked by great diversity and, even allowing for the special regional adaptations made necessary by soil, climate, terrain and altitude, there are many agricultural establishments which individually exhibit a wide range of activities.

For many agricultural products, Tasmania produces considerably more than could be consumed locally and farmers must look outside the State for markets. One consequence of this is that the industry is affected significantly by international currency movements and changes to the degree of protection in overseas markets.

The pattern of farming in Tasmania has maintained an emphasis on rearing livestock for meat production with dairy products and wool also important. Apple growing, while still significant, has reduced its dependence on European markets with a greater proportion of the crop now sold interstate. The growing of vegetables for processing is a significant activity and oil poppies have become an important but fluctuating crop in the last few years.

##### Historical

The 1976 and earlier editions of the *Year Book* include a summary of agricultural statistics available from as early as 1818.

##### Agricultural Industry Statistics

###### *Sources of Information*

The statistics are principally compiled from census returns of livestock and crop production collected from establishments undertaking agricultural activity in Tasmania at 31 March each year. In conjunction with the general census, supplementary collections from farms are conducted where the harvesting of certain crops has not been completed by 31 March (e.g. apples, potatoes).

Additional information is also obtained from various marketing and other authorities and from a number of entirely separate collections covering such data as slaughtering and meat and dairy production.

###### *Period Covered*

Data relating to area sown, production and number of establishments growing crops are generally for the season ended 31 March. In cases where harvesting has not been completed by 31 March (e.g. potatoes), total production is nevertheless collected and included in published figures. Livestock numbers are also reported as at 31 March.

The census is conducted at 31 March (rather than 30 June) as it is considered to be the most appropriate date for all States to draw a line between the activities of two successive seasons.

The following tables give an indication of the seasonality of agricultural production in Tasmania. It should be noted that variations from the periods specified occur owing to variety of seed, district, seasonal conditions, scheduling of shearing and harvesting.

## Times of Planting and Harvesting Principal Crops, Tasmania

<i>Crop</i>	<i>Time of planting</i>	<i>Harvesting period</i>	<i>Crop</i>	<i>Harvesting period</i>
Cereals—			Fruit—	
Barley .....	Sept. to Nov.	Feb. to Mar.	Apples .....	Feb. to May
Oats .....	Mar. to Oct.	Nov. to Mar.	Apricots .....	Jan. to Feb.
Wheat .....	May to Sept.	Jan. to Feb.	Peaches .....	Jan. to Feb.
Vegetables—			Pears .....	Feb. to April
Beans, French and runner .....	Sept. to Jan.	Feb. to Apr.	Plums .....	Jan. to Feb.
Peas, green .....	June to Dec.	Nov. to Feb.	Raspberries .....	Dec. to Jan.
Potatoes—			Currants .....	Jan. to Feb.
Early .....	May to July	Oct. to Nov.	Gooseberries .....	Nov. to Dec.
Late .....	Aug. to Nov.	Feb. to June	Strawberries .....	Nov. to Jan.
Tomatoes .....	Oct. to Nov.	Feb. to April		
Other crops—				
Hops .....		Feb. to Mar.		
Field peas .....	July to Sept.	Jan. to April		
Oil poppies .....	Aug. to Oct.	Jan. to Feb.		

## Main Shearing, Lambing and Slaughtering Periods, Tasmania

<i>Activity</i>	<i>Period</i>
Shearing (a) .....	August to January
Lambing—	
Spring .....	August to October
Autumn and winter .....	March to July
Slaughtering for export—	
Lambs (a) .....	November to March

(a) The period shown is that in which the seasonal activity is more pronounced.

*Agricultural Establishment—Definition*

Prior to 1975-76 an 'agricultural establishment' was defined as 'a piece of land, one hectare or more in extent, used for the production of crops or for the raising of livestock and the production of livestock products'. Establishments of less than one hectare, on which commercial agricultural pursuits were carried out (e.g. nurseries, poultry farms, etc.) were also generally included.

It was recognised that many small holdings included under this definition were not engaged in agriculture on a 'commercial' scale and that the contribution such 'sub-commercial' holdings made to item totals was, in most cases, negligible.

With the creation of a new register of agricultural businesses in 1974-75 the opportunity was taken to streamline the Agricultural Census by redefining the basic Census unit; an establishment undertaking agricultural activity has been included in the statistics if the enterprise operating the establishment had, or was expected to have, an estimated value of agricultural operations of \$1 500 or more during the current season.

The estimated value of operations for 1980-81 was obtained for each establishment by applying unit values to the commodity data reported on the 1979-80 Agricultural Census returns. The unit values used were averages for the three years 1977-78 to 1979-80 to reduce the effects of short-term fluctuations in prices. In the case of crops, both area and production were valued, and for livestock, both animals sold during the year and numbers on farms at 31 March were valued. This was done to reduce the effects of variations in average yields and to give due acknowledgement to any business that undertook agricultural operations but did not actually sell any agricultural commodities during the year (due to factors such as crop failures or unfavourable market conditions).

The value of operations concept is merely a convenient way of objectively determining: (i) the relative scales of activity of establishments undertaking agricultural

activity so as to exclude the sub-commercial ones; and (ii) the industry classification of establishments. It is *not* a method of calculating *actual* gross income of farms.

The total effect of the new definition was not felt in 1975-76 as a resistance factor had been introduced to prevent rural establishments of 10 hectares or more being excluded from the tabulations even if their value of agricultural operations were less than \$1 500. However, these establishments were excluded from the 1976-77 tabulations if their value of agricultural operations remained below \$1 500. The exclusion of these establishments accounted for most of the total decrease of approximately 2 000 (25 per cent) in the number of establishments in the 1976-77 tabulations from the previous year. A further revision for 1978-79, to recognise the activities of all beekeepers, involved the inclusion of beekeepers without rural land. These beekeepers were previously excluded from establishment counts, although their beekeeping activities were included.

An analysis undertaken to investigate the possible effect of the new definitions, and the consequent exclusion of a large number of 'sub-commercial' establishments, on census totals suggests that, except for a few minor crops, the effect on data is minimal.

### Classification of Agricultural Enterprises by Industry

Creation of the new register of agricultural businesses (enterprises) and the application of the Australian Standard Industrial Classification to the agricultural sector has enabled the production of a classification of agricultural enterprises by size and industry. (An *enterprise* is defined as that unit comprising all operations in Australia of a single, operating legal entity. See also 'Economics Censuses and Surveys' in Chapter 19 for an explanation of the concepts of 'enterprise' and 'establishment'.) The industry class of an agricultural enterprise is determined basically according to the predominant activity as measured after the application of unit values to commodity data.

The following table shows for 1980-81 all agricultural enterprises in Tasmania with an estimated value of operations of \$1 500 or more, classified according to industry class and estimated value of operations:

Agricultural Enterprises (a) Classified According to Industry Class and Estimated Value of Operations, Tasmania, 1980-81  
(Number)

Industry class	Estimated value of operations (\$'000)						Total
	2 to 9	10 to 19	20 to 39	40 to 59	60 to 99	100 and over	
Sheep-meat cattle .....	216	126	131	76	77	113	739
Sheep .....	345	194	225	107	108	114	1 093
Meat cattle .....	640	240	166	35	35	15	1 131
Milk cattle .....	85	190	438	313	174	59	1 259
Pigs .....	46	39	32	13	9	12	151
Orchard and other fruit .....	74	38	68	43	68	92	383
Vegetables—potatoes .....	13	25	48	72	99	77	334
Vegetables—other .....	29	27	39	20	35	40	190
Other .....	140	101	80	29	24	31	405
Total .....	1 588	980	1 227	708	629	553	5 685

(a) An agricultural enterprise may comprise more than one establishment which undertakes agricultural activity. Column headings have been rounded to the nearest thousand dollars.

### Size of Agricultural Establishments

In the following table, rural establishments have been classified to size groups. The table shows the number and area of rural establishments in these groups for each statistical division.

## Classification of Rural Establishments by Size, Tasmania, 1980-81

Statistical Division	Under 50 ha	50- 99 ha	100- 299 ha	300- 999 ha	1 000 ha & over	Total
<i>Number of establishments—</i>						
Hobart .....	145	40	62	32	5	284
Southern .....	340	268	363	257	215	1 443
Northern .....	389	377	735	403	191	2 095
Mersey-Lyell .....	736	689	733	181	27	2 366
Tasmania .....	1 610	1 374	1 893	873	438	6 188
<i>Area of establishments ('000 ha)—</i>						
Hobart .....	2	3	10	16	10	42
Southern .....	8	19	62	136	610	837
Northern .....	11	27	128	213	595	975
Mersey-Lyell .....	21	50	117	89	90	367
Tasmania .....	43	100	317	456	1 306	2 220

## Number of Establishments with Crops or Livestock

At 31 March 1981 there were 6 188 establishments which satisfied the definition of an agricultural establishment (see earlier this Chapter). The following table shows the number of establishments growing selected principal crops or carrying livestock. This gives some indication of farming activities on a broad basis only, since the same establishment may be included more than once in the figures (in an extreme case, one establishment could be included 11 times).

## Number of Establishments Growing Principal Crops or Carrying Livestock, Tasmania

Particulars	1975-76(a)	1976-77(a)	1977-78	1978-79	1979-80	1980-81
Number of agricultural establishments (at 31 March) .....	8 214	6 154	6 141	(a)6 142	6 180	6 188
Establishments—						
Growing—						
Grain (b)—						
Barley .....	386	358	385	398	352	325
Oats .....	115	197	151	280	221	253
Wheat .....	47	53	40	43	50	44
Hops .....	28	26	22	22	21	21
Vegetables (c)—						
Potatoes .....	663	684	636	599	547	564
Onions .....	66	43	48	52	73	78
Fruit (c)—						
Orchard tree .....	425	398	367	373	361	359
Small fruit .....	211	168	169	162	181	186
Carrying—						
Cattle .....	7 229	5 541	5 428	5 186	5 056	5 063
Sheep .....	3 579	3 062	3 127	3 207	3 288	3 351
Pigs .....	974	900	851	775	690	569

(a) Not comparable with previous years, see definition of 'Agricultural establishment' given earlier.

(b) Ten hectares and over.

(c) 0.5 hectares and over.

### Land Utilisation on Agricultural Establishments

Establishments undertaking agricultural activity at present occupy 32.5 per cent of Tasmania's area of 6 830 000 hectares; details of land utilisation follow:

Land Utilisation on Agricultural Establishments, Tasmania  
(Hectares)

Type of usage	1977-78	1978-79	1979-80	1980-81
Crops (excluding sown pastures harvested) (a)	69 686	80 439	77 624	83 203
Sown pastures (b) .....	909 862	904 261	895 220	902 679
Balance (used mainly for grazing) .....	1 301 729	1 247 018	1 256 310	1 234 454
Total area of all establishments .....	2 281 277	2 231 718	2 229 154	2 220 336

(a) Excludes area of sown pasture harvested; includes orchards and small fruits.

(b) Includes area harvested. Lucerne is classified to sown pastures.

#### Definition of 'Crops'

'Crops' as specified in the previous table refers only to cultivated fields and orcharding land. Also, the total area of land sown or planted to crops is shown irrespective of whether the whole area was subsequently harvested or whether a portion or the whole of a crop failed and was not harvested. Where two successive crops are grown on the same land during the one season, the actual area of crops will exceed the area of land used for cropping. Further it is reasonable to regard as a crop the yield obtained from harvesting sown pastures. The next table shows the total area of crops, using this wider definition and taking account of double-cropping:

Total Area of Crops, Tasmania  
(Hectares)

Area	1977-78	1978-79	1979-80	1980-81
Area used for crops (a) .....	69 686	80 439	77 624	83 203
Area double-cropped .....	2 299	2 637	582	731
Sown pastures harvested (b) .....	49 081	70 257	61 087	66 211
Total area of crops .....	121 066	153 333	139 293	150 145

(a) As shown in previous table.

(b) Includes lucerne.

#### Definition of 'Sown Pasture'

Sown pasture is pasture which has been developed by the sowing of non-indigenous grasses or legumes. The next table shows the total area of sown pasture and distinguishes between areas cut for various purposes and areas simply grazed:

Sown Pasture, Tasmania: Classification of Total Area  
(Hectares)

Particulars	1977-78	1978-79	1979-80	1980-81
Pasture harvested—				
Hay .....	46 480	65 835	57 689	61 555
Seed .....	922	1 958	1 436	1 730
Green feed or silage .....	1 679	2 464	1 962	2 926
Total pastures harvested .....	49 081	70 257	61 087	66 211
Pastures not harvested .....	860 781	834 004	834 133	836 468
Total sown pasture .....	909 862	904 261	895 220	902 679

## CROPS

The summary table below shows the area devoted to principal crop types. The table shows that the area of pasture crops (harvested for hay, seed, green feed and silage) varies significantly from season to season.

Area of Principal Crops, Tasmania: Summary  
(Hectares)

<i>Crop</i>	1977-78	1978-79	1979-80	1980-81
<b>Section 1 (a)—</b>				
Cereals for grain .....	17 332	21 901	20 122	21 356
Legumes mainly for grain .....	1 074	1 307	1 261	701
Crops for hay (b) .....	2 121	2 200	1 972	2 533
Crops for green feed or silage (c) .....	26 622	30 075	32 881	36 151
Fruit—Orchard tree .....	3 071	3 109	3 088	3 026
Berry and small .....	449	442	513	520
Vegetables for sale for human consumption ..	12 224	13 010	13 901	14 458
Hops .....	567	578	620	672
Oil poppies .....	7 969	8 739	1 554	3 350
Other crops (d) .....	555	1 717	2 293	1 168
Total section 1 (e) .....	71 985	83 076	78 206	83 934
<b>Section 2—</b>				
Pasture harvested for hay, seed, green feed or silage (f)—				
Pasture hay .....	46 480	65 835	57 689	61 555
Pasture seed .....	922	1 958	1 436	1 730
Pasture harvested for green feed or silage ..	1 679	2 464	1 962	2 926
Total section 2 .....	49 081	70 257	61 087	66 211
Total area of crops .....	121 066	153 333	139 293	150 145

(a) Section 1 excludes pastures harvested for hay, seed, green feed or silage; details for these are given in Section 2.

(b) Excludes pasture hay; see Section 2.

(c) Includes vegetables for stock feed but excludes pastures harvested for green feed or silage; see Section 2.

(d) Includes grapes, lavender, vegetables for seed, nurseries, cut flowers, lupins and mint.

(e) Includes land double-cropped; in 1980-81 area involved was 731 hectares.

(f) Includes lucerne harvested.

Details of individual crops, their area, production and yield per hectare, are shown in the next table:

Crops: Area, Production and Yield per Hectare, Tasmania, 1980-81

Crop	Area (hectares)	Production	
		Total	Yield per hectare
Cereals for grain—			
Barley .....	10 056	18 307	1.8
Oats .....	8 871	11 146	1.3
Triticale .....	903	1 151	1.3
Wheat .....	1 614	2 545	1.6
Legumes mainly for grain—			
Horse beans .....	56	89	1.6
Lupins .....	56	96	1.7
Field peas—			
Blue .....	413	587	1.4
Grey and other .....	176	208	1.2

Crops: Area, Production and Yield per Hectare, Tasmania, 1980-81—continued

Crop	Area (hectares)	Production	
		Total	Yield per hectare
Hay—			
Pasture (incl. lucerne) .....	61 555	241 817	3.9
Oaten .....	2 148	6 461	3.0
Other .....	385	1 070	2.8
Orchard tree fruit—			
Apples .....	n.a.	76 033	n.a.
Apricots .....	n.a.	295	n.a.
Pears .....	n.a.	2 095	n.a.
Berry and small fruit—			
Bearing—			
Currants (black and red) .....	252	772	3.1
Gooseberries .....	3	11	4.2
Loganberries .....	18	126	7.1
Raspberries .....	96	416	4.4
Strawberries .....	20	131	6.6
Non-bearing .....	131	..	..
Vegetables for human consumption—			
Beans, French and runner .....	1 263	10 319	8.2
Peas, green (a)—			
For processing .....	7 097	26 547	3.7
Sold in pod .....	10	11	1.1
Potatoes .....	4 335	155 965	36.0
Turnips, swede and white .....	179	2 289	12.8
Other .....	1 574	..	..
Pasture seed (incl. lucerne) .....	1 730	575	0.3
Other crops—			
Hops (b) .....	672	1 558	2.3
Oil poppies .....	3 350	n.p.	n.p.

(a) Ex-shell weight.

(b) Production is expressed as dry weight.

### Principal Crops

Although data on area and production of crops are compiled, to give totals for each municipality, information in subsequent parts of this chapter dealing with geographical distribution is presented only in statistical divisions. The Hobart and Southern Division totals have been combined since the Hobart Division is predominantly urban in character. A description of the Tasmanian Statistical Divisions and Sub-divisions appears in Chapter 2.

### Summary of Principal Crops

The following tables, which summarise the area of selected principal crops and give details of production for recent years, illustrate the importance of potatoes, green peas, French and runner beans for processing, and the declining importance of orchards and small fruit. Oil poppies have become an important crop in recent years but details are not included as the figures relating to production are not available for publication.

## Selected Principal Crops, Tasmania: Area and Production

Crop	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Area (Hectares)</i>						
Barley for grain .....	11 475	11 644	11 444	11 938	10 558	10 056
Oats for grain .....	3 924	6 387	4 616	8 564	7 489	8 781
Wheat for grain .....	1 644	1 980	1 257	1 366	1 972	1 614
Total hay .....	71 567	72 001	48 601	68 035	59 661	64 088
Field peas .....	447	415	719	993	960	589
Pasture seed .....	628	1 018	922	1 958	1 436	1 730
Hops (a) .....	513	587	567	578	620	672
Beans, French and runner .....	1 054	1 277	1 143	1 405	1 207	1 263
Peas, green—						
For processing .....	5 525	6 363	6 221	6 476	6 997	7 097
Sold in pod .....	13	11	7	8	7	10
Potatoes .....	3 354	3 705	3 592	3 646	4 115	4 335
Orchard (tree) bearing (b)—						
Apples .....	2 947	2 741	2 601	2 693	2 661	n.a.
Pears .....	145	114	103	110	99	n.a.
Berry and small fruit, bearing—						
Currants (black and red) .....	208	207	209	203	245	252
Loganberries .....	37	23	24	24	16	18
Raspberries .....	139	115	102	99	98	96
Strawberries .....	11	15	21	18	20	20
<i>Production (Tonnes)</i>						
Barley for grain .....	18 389	24 571	19 403	26 971	17 304	18 307
Oats for grain .....	3 497	8 801	4 279	11 826	7 937	11 146
Wheat for grain .....	1 728	3 929	1 545	2 867	3 727	2 545
Total hay .....	327 239	344 549	172 348	304 847	249 766	249 348
Field peas .....	586	765	761	1 850	1 056	795
Pasture seed .....	141	246	172	722	442	575
Hops (c) .....	1 129	1 330	1 201	1 457	1 183	1 558
Beans, French and runner .....	10 077	10 996	8 296	13 464	6 618	10 319
Peas, green (d)—						
For processing .....	20 680	31 632	27 223	30 171	25 608	26 547
Sold in pod .....	8	8	7	8	7	10
Potatoes .....	95 614	112 269	107 240	124 385	136 197	155 965
Apples .....	68 712	71 781	63 444	85 230	74 434	76 033
Pears .....	2 853	1 434	1 913	2 643	2 339	2 095
Currants (black and red) .....	470	575	681	787	1 102	772
Loganberries .....	154	222	142	138	167	126
Raspberries .....	656	563	552	424	513	416
Strawberries .....	72	84	84	104	108	131

(a) Includes areas not in full bearing.

(b) Area details by variety are not available for 1980-81.

(c) Dry weight.

(d) Ex-shell weight.

*Cereals for Grain*

Barley has become the most important cereal grain crop, the area sown having stabilised after a steady increase up to 1970-71. The area of oats for grain during 1980-81 increased by 17 per cent from 1979-80, while the area of wheat for grain was 18 per cent down on the 1979-80 figure. Triticale, used mostly for feeding to poultry, became a significant cereal grain crop during 1980-81. The following table shows the Tamar Statistical Sub-division as the major grain growing district with the Southern Statistical Division not far behind.



**Area of Cereals for Grain by Statistical Division, 1980-81  
(Hectares)**

Cereals for grain	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Barley .....	2 435	4 821	751	5 572	2 049	—	2 049	10 056
Oats .....	3 284	2 981	2 409	5 390	107	—	107	8 781
Triticale .....	244	94	16	110	63	—	63	417
Wheat .....	690	554	295	849	75	—	75	1 614
Other .....	614	241	24	265	26	—	26	905
Total .....	7 267	8 691	3 495	12 186	2 320	—	2 320	21 773

(a) Statistical sub-division.

#### *Legumes Mainly for Grain*

The following table illustrates the geographical distribution of legumes mainly grown for grain and shows the Tamar Statistical Sub-division to be the major producing area:

**Area of Legumes Mainly for Grain by Statistical Division, 1980-81  
(Hectares)**

Crop	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Horse beans .....	—	51	—	51	5	—	5	56
Lupins .....	—	20	35	55	1	—	1	56
Field peas—								
Blue .....	—	379	19	398	15	—	15	413
Grey, etc. ....	56	47	—	47	73	—	73	176

(a) Statistical sub-division.

#### *Hay and Green Feed*

The following table shows the geographical distribution of hay and green feed crops:

**Area of all Hay and Crops for Green Feed or Silage by Statistical Division, 1980-81  
(Hectares)**

Crop	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Hay—								
Pasture .....	8 544	18 901	10 525	29 426	23 580	5	23 585	61 555
Oaten .....	635	936	240	1 176	337	—	337	2 148
Other .....	220	72	49	121	44	—	44	385
Total .....	9 399	19 909	10 814	30 723	23 961	5	23 966	64 088
Crops for green feed or silage (b) .	15 608	9 435	7 853	17 288	6 039	142	6 181	39 077

(a) Statistical sub-division.

(b) Includes vegetables for stock feed and pasture harvested for green feed or silage.

The North Western Sub-division, with the largest area devoted to sown pastures, produces 37 per cent of the State's hay. Its predominance in area under hay and green feed crops can be related to the fact that it carries 36 per cent of the State's cattle and is the principal dairying area.

The main green feed crops are oats and turnips (approximately 72 per cent of the total green feed area); other green feed crops include rape, chou moellier, barley, millet, ryecorn and wheat.

#### *Orchard Tree Fruit and Berry and Small Fruit*

Orcharding is heavily concentrated in and around the Huon Valley (Southern Statistical Division); the other main area is in the Tamar Valley (Northern Division). Berry and small fruit growing is almost entirely confined to the Derwent and Huon Valleys.

**Area of Orchard Tree and Berry and Small Fruit by Statistical Division, at 31 March 1981**  
(Hectares)

Type	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Orchard tree fruit .....	2 290	451	8	459	276	—	276	3 026
Berry and small fruit ..	445	6	21	27	48	—	48	520

(a) Statistical sub-division.

The following table shows the number and variety of fruit trees grown in Tasmania over recent years:

**Fruit Trees, Tasmania**  
(<sup>'000</sup>)

Variety	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Apples .....	1 261	1 200	1 206	1 210	1 212	1 174
Pears .....	49	46	47	45	42	38
Apricots .....	26	29	32	29	30	29
Peaches .....	2	2	3	2	2	2
Nectarines .....	2	2	2	(a) 13	2	2
Cherries .....	7	6	6		7	8
Plums and prunes .....	2	2	2		2	2

(a) Separate details of the number of trees for cherries, nectarines and plums and prunes were not collected in 1980.

With the continued decline in apple production, the gross value of the 1981 season's apple crop represented only 21 per cent of the total gross value of all crops (see page 366). The next table gives recent details of area, production and average yield:

**Apples: Area and Production, Tasmania**

Season	Area		Number of trees		Production		
	Bearing	Non-bearing	Bearing	Non-bearing	Total	Yield	
						Per bearing hectare	Per bearing tree
	hectares	hectares	'000	'000	tonnes	tonnes	kg
1976 .....	2 947	385	1 220	160	72 529	24.7	60
1977 .....	2 741	311	1 132	128	71 781	26.2	63
1978 .....	2 601	261	1 091	110	63 444	24.4	58
1979 .....	2 693	197	1 124	82	85 230	31.6	76
1980 .....	2 661	216	1 119	91	74 434	28.0	67
1981 .....	n.a.	n.a.	1 086	126	76 033	n.a.	70

**Economic Problems:** In recent years, instability in overseas markets and shipping costs have prompted the introduction of assistance to apple growers through schemes providing a stabilisation price for each variety of apple exported at risk to European markets. In the 1971 export season the Federal Government's *Apple and Pear Stabilisation Act* came into effect. Under this Act a support price was decided upon for each variety and, depending on the average market return for that variety, payments either into or from the fund were calculated. Net amounts paid for apples under this scheme were: 1971-72, \$1 872 000; 1972-73, \$1 798 000; 1973-74, \$1 918 000; 1974-75, \$1 733 000; 1975-76, \$2 540 000; 1976-77, \$527 000; 1977-78, \$258 000; 1978-79, \$1 962 000; 1979-80, \$204 000 and 1980-81, \$2 243 000.

Since the 1974 season further subsidies have been provided under the *Apple Industry (Assistance) Act*. This Act, which effectively lifts the limit on payments under the stabilisation scheme, provides for equal contributions from the Federal and State Governments; however, in 1975-76 the Tasmanian Government paid an extra \$284 000. The total payments under this Act have been: 1973-74, \$3 180 000; 1974-75, \$1 144 000; 1975-76, \$742 000; 1976-77, \$78 000; 1977-78, \$178 000; 1978-79, \$1 923 000; 1979-80, \$94 000 and 1980-81, \$1 030 000.

With the introduction of a new underwriting scheme from the 1981 season, stabilisation payments for apples have been phased down and payments for pears terminated. The new scheme is wholly funded by the Commonwealth Government with the level of support calculated at 95 per cent of the weighted f.o.b. return per box of apples or pears to all markets in the immediately preceding four seasons.

As shown earlier in this chapter, the number of holdings with at least 0.5 hectares of orchard tree fruit (apples, pears, apricots, etc.) was only 359 at 31 March 1981. While this is substantially below the number of holdings with orchard trees ten years ago (1 007 holdings at 31 March 1971), it has been stable at approximately 360 holdings since 1978.

A wide variety of apples is produced in Tasmania but many only in small quantities. Of the total production of 76 033 tonnes in 1981, two varieties accounted for 41 per cent (granny smith, 21 per cent and democrat, 20 per cent), golden delicious, jonathan, red delicious and sturmer pippin accounted for a further 44 per cent between them.

In the period from 1948-49 State production of berry and small fruit has dropped by over three quarters. In spite of this Tasmania is still the principal producer of raspberries and black currants in Australia.

Principal Small Fruits: Area and Production, Tasmania

Year	Currants (black and red)		Loganberries		Raspberries		Strawberries	
	Bearing area	Pro- duction	Bearing area	Pro- duction	Bearing area	Pro- duction	Bearing area	Pro- duction
	hectares	tonnes	hectares	tonnes	hectares	tonnes	hectares	tonnes
1948-49 (a) .....	812	2 735	86	380	844	3 449	101	395
1975-76 .....	208	470	37	154	139	656	11	72
1976-77 .....	207	575	23	222	115	563	15	84
1977-78 .....	209	681	24	142	102	552	21	84
1978-79 .....	203	787	24	138	99	424	18	104
1979-80 .....	245	1 102	16	167	98	513	20	108
1980-81 .....	252	772	18	126	96	416	20	131

(a) Representative year from period when small fruit areas were at their highest level.

### Vegetables for Sale for Human Consumption

The concentration of vegetable growing in certain areas of the State is illustrated in the following table:

Vegetables for Sale for Human Consumption (a)  
Area Under Selected Crops by Statistical Division, 1980-81  
(Hectares)

Crop	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (b)	North Eastern (b)	Total	North Western (b)	Western (b)	Total	
Beans, French and runner	—	83	77	160	1 102	—	1 102	1 262
Peas, green	14	2 593	445	3 038	4 055	—	4 055	7 107
Potatoes	200	138	394	532	3 604	—	3 604	4 335
Onions	2	23	43	66	364	—	364	431
Other vegetables	190	165	57	222	908	2	910	1 322
Total	406	3 002	1 016	4 018	10 033	2	10 035	14 458

(a) Includes vegetables for processing.

(b) Statistical sub-division.

### Hops

The almost universal use of the 'Pride of Ringwood' hop variety has led to a general increase in per hectare yields in recent years. As well, this variety has a higher percentage of usable resin than the older types and, at the same time, more efficient extraction methods have been devised. This has led to a changed disposal pattern with more emphasis on export, although export markets have not been particularly rewarding recently and stockpiling has occurred.

The majority of hops produced are seedless (through the exclusion of male plants) in order to meet changing brewery demand and the market for hop extract. Hops for shipment are dried, hammer-milled, compressed into pellets and put into airtight containers that are either vacuum sealed or nitrogen flushed before sealing. This reduces resin losses due to oxidation, allows storage without refrigeration and decreases the bulk to be shipped.

Tasmania's total production of 1 158 tonnes in 1980-81 was 67 per cent of the total Australian hop production of 2 309 tonnes. The next table shows details of area, production and gross value over a six-year period:

Hops, Tasmania: Area, Production and Gross Value

Season	Number of growers	Total area	Production		
			Total (a)	Yield per hectare (a)	Value
		hectares	tonnes	kg	\$'000
1975-76	28	513	1 129	2 200	1 575
1976-77	26	587	1 330	2 266	2 254
1977-78	22	565	1 201	2 126	2 351
1978-79	22	578	1 457	2 521	3 209
1979-80	22	620	1 183	1 908	3 021
1980-81	21	672	1 558	2 318	4 678

(a) Dry weight.

### Oil Poppies

Initially, oil poppies were grown on the mid North-West Coast; they more recently have been grown in other parts of the State, although adverse weather conditions, particularly excessive rain, have proved to be a problem in some areas.

In 1980-81 the total area of oil poppies was 3 350 hectares compared with 1 554 hectares in the previous year and 8 739 hectares in 1978-79, the distribution being: Hobart and Southern Statistical Divisions, 477 hectares; Northern, 856 hectares; and Mersey-Lyell, 2 017 hectares.

The sudden decrease in the area of oil poppies in 1979-80 was caused by the closure of the United States' market to the Tasmanian product. Subsequent negotiations reopened this market bringing a recovery to the industry.

Oil poppy growing provides the raw material in the production of codeine and, within Australia, is at present restricted to Tasmania where two processing plants now operate.

Production figures are not available for publication.

### Pasture Seed

The geographical distribution (in hectares) of areas yielding pasture seed in 1980-81 was as follows: Hobart and Southern, 327; Northern, 1 288; Mersey-Lyell, 115; total, 1 730. The area of pasture seed fluctuates widely depending on farming conditions; in 1975-76, 628 hectares yielded seed.

The main seed varieties produced on Tasmanian farms during previous years are listed in the following table:

Pasture Seed Production (a)						
	(kg)					
Type of Grass	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Clover—White .....	6 460	6 643	765	10 606	8 533	300
Other .....	1 815	1 060	1 050	880	7 275	50
Ryegrass—Perennial .....	68 432	112 718	60 151	351 751	293 313	420 322
Hybrid .....	4 740	5 620	5 440	17 920	32 139	19 552
Italian .....	36 813	74 643	91 715	283 910	72 011	84 470
Cocksfoot .....	13 751	32 433	12 320	42 305	13 740	44 619
Other grasses .....	8 543	12 570	1 000	14 420	14 679	5 630
Total .....	140 554	245 687	172 441	721 792	441 690	574 943

(a) Includes all pasture seed harvested, whether as a separate crop or from an area sown to grain crops.

## LIVESTOCK

### Introduction

This subject is dealt with in two parts: (i) the first deals with numbers of livestock on establishments undertaking agricultural activity; and (ii) a second part, 'Livestock Products'.

The first part needs no comment but the second part ('Livestock Products') requires explanation. In relation to the various types of livestock, the following products are included:

*Cattle*—meat, milk, butter, cheese.      *Sheep*—meat, wool.  
*Pigs*—meat.      *Poultry*—meat, eggs.

Butter, meat and cheese, although regarded as manufacturing industry products, are included in the later section 'Livestock Products', because the pattern and scale of livestock farming is closely linked to the processing of these products.

### Number of Livestock on Agricultural Establishments

The following summary table shows the number of livestock on agricultural establishments for recent years:

Livestock on Agricultural Establishments, Tasmania, at 31 March  
('000)

Year	Cattle	Sheep	Pigs
1976 .....	909.2	4 248.9	69.8
1977 .....	818.8	4 014.6	64.6
1978 .....	733.3	3 969.3	64.2
1979 .....	656.9	4 156.6	60.8
1980 .....	649.3	4 245.4	63.5
1981 .....	658.5	4 380.9	54.5
	%	%	%
Tasmanian numbers as proportion of Australian total (1980-81) .....	2.6	3.3	2.2

### Cattle

#### Classification

The traditional way of classifying cattle has been to call them either 'dairy' or 'beef' cattle but this has led to confusion since the terms may refer to either *purpose* or *breed*. In the period 1942-43 to 1962-63, the annual farm census required this dissection but the terms were not defined. From 1963-64 the cattle groupings have been organised to distinguish between: (i) bulls classified by *breed*; (ii) 'house cows' specified separately; and (iii) all other cattle classified according to *purpose* (i.e. milk production or meat production). The results of the 1979-80 and 1980-81 farm censuses are given in the following table. This closely follows the lay-out of the collection form.

Classification of Cattle on Agricultural Establishments at 31 March, Tasmania  
('000)

Description	1980	1981
<i>Milk Cattle</i>		
<b>Dairy breed bulls used or intended for service—</b>		
Bulls 1 year and over .....	2.0	2.0
Bull calves under 1 year intended for service .....	0.8	0.7
<b>Dairy cows and heifers—</b>		
Cows, in milk and dry .....	103.2	98.8
Heifers, 1 year and over .....	24.6	23.6
Heifer calves, under 1 year .....	24.0	22.8
<b>House cows (in milk and dry) and heifers</b> .....	1.4	1.5
<b>Total milk cattle</b> .....	155.9	149.4

**Classification of Cattle on Agricultural Establishments at 31 March, Tasmania**  
(\*000)—continued

<i>Description</i>	<i>1980</i>	<i>1981</i>
<i>Meat cattle</i>		
<b>Beef breed bulls used or intended for service—</b>		
Bulls 1 year and over .....	9.7	9.3
Bull calves under 1 year intended for service .....	3.6	2.9
<b>Other cattle and calves (not included above) mainly for meat production—</b>		
Cows and heifers, 1 year and over .....	240.6	243.8
Heifer calves, under 1 year .....	68.2	72.2
Other calves under 1 year .....	84.6	88.9
Other cattle, 1 year and over .....	86.6	92.1
<b>Total meat cattle .....</b>	<b>493.3</b>	<b>509.1</b>
<b>Total cattle and calves for all purposes .....</b>	<b>649.3</b>	<b>658.5</b>

The geographical distribution of establishments with cattle is shown below:

**Distribution of Cattle in Statistical Divisions, 31 March 1981**

<i>Statistical division or sub-division</i>	<i>Number of establish- ments with cattle no.</i>	<i>Total dairy cattle (a) (*000)</i>	<i>Total beef cattle (b) (*000)</i>	<i>Total cattle (*000)</i>
Hobart and Southern .....	1 195	9.3	99.0	108.4
Northern—				
Tamar .....	1 161	34.7	112.0	146.7
North Eastern .....	600	17.9	120.8	138.7
<b>Total .....</b>	<b>1 761</b>	<b>52.6</b>	<b>232.8</b>	<b>285.4</b>
Mersey-Lyell—				
North Western .....	2 101	87.5	176.2	263.7
Western .....	6	—	1.1	1.1
<b>Total .....</b>	<b>2 107</b>	<b>87.5</b>	<b>177.3</b>	<b>264.8</b>
<b>Total Tasmania .....</b>	<b>5 063</b>	<b>149.4</b>	<b>509.1</b>	<b>658.5</b>

(a) Includes dairy breed bulls and bull calves, cows and heifers used or intended for production of milk and cream for sale, and house cows.

(b) Includes beef breed bulls and bull calves, and other cattle and calves mainly for meat production.

The change in classification of cattle (outlined above) makes it impossible to compare, in full detail, the description of cattle in 1964-65 and subsequent years with descriptions reported in previous years but the following table is compiled to show broad groups regarded as generally comparable:

Description of Cattle on Agricultural Establishments at 31 March, Tasmania

Year	Number of establishments with cattle	Bulls (1 year and over) ( <sup>'000</sup> )	Cows and heifers (1 year and over) ( <sup>'000</sup> )	Calves (under 1 year) ( <sup>'000</sup> )	Other ( <sup>'000</sup> )	Total cattle ( <sup>'000</sup> )
1950 .....	9 759	6.2	158.4	60.6	49.5	274.7
1955 .....	9 668	7.0	194.0	78.3	40.1	319.4
1960 .....	9 031	7.2	229.2	100.8	38.1	375.3
1965 .....	8 384	(a) 8.3	284.0	119.5	39.8	451.5
1970 .....	8 405	10.8	378.8	200.6	56.2	646.4
1975 .....	7 986	16.5	502.2	279.9	122.3	920.8
1980 (b) .....	5 056	11.7	370.9	181.2	86.6	649.3
1981 .....	5 063	11.2	367.7	187.5	92.1	658.5

(a) The specification of 'Bull calves (under 1 year)' from 1963-64 may affect the comparability of the series.

(b) Not directly comparable with earlier years; see definition of 'Agricultural establishment', given earlier.

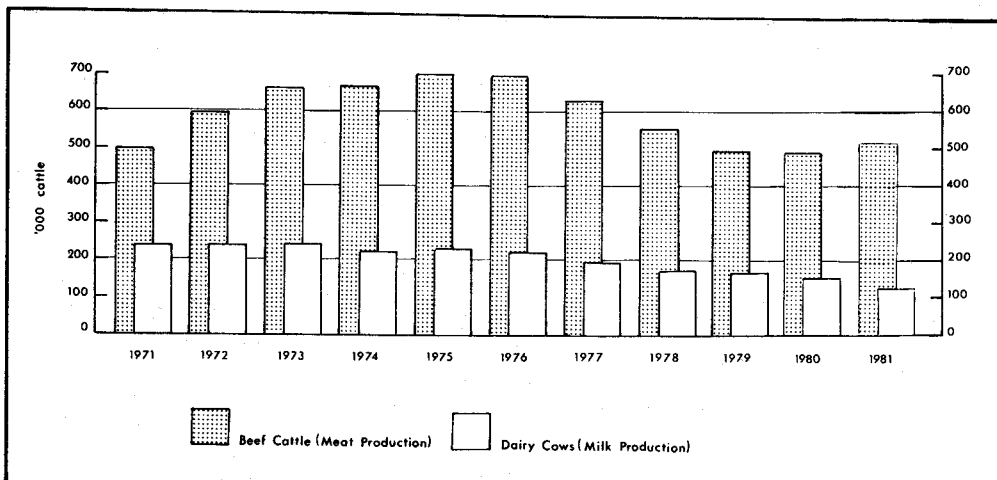
### Breeds of Cattle

The main breeds of cattle in Tasmania for milk production are Jersey, Friesian and Ayrshire with small numbers of milking Shorthorn and Guernsey, while breeds used for the production of beef are Hereford, Aberdeen Angus, Shorthorn and Devon. In recent years, new cattle lines such as the Brahmans, Murray Greys and Charolais have been introduced by farmers wishing to utilise the advantages of cross-breeding.

The following graph gives an indication of the recent trends in numbers of cattle according to their association with the beef industry or the dairy industry. Details of the classification used are given in the notes to a table above.

### Numbers of Beef and Dairy Cattle, Tasmania

(Cattle Mainly for Meat Production and Cattle Mainly for Milk Production)





### Sheep

The table below shows sheep numbers on agricultural establishments for recent years:

Sheep on Agricultural Establishments, at 31 March, Tasmania ('000)

Year	Sheep	Year	Sheep	Year	Sheep	Year	Sheep
1970 .....	4 559.6	1973 .....	3 824.4	1976 .....	4 248.9	1979 .....	4 156.6
1971 .....	4 517.2	1974 .....	3 963.8	1977 .....	4 014.6	1980 .....	4 245.4
1972 .....	4 236.7	1975 .....	4 136.2	1978 .....	3 969.3	1981 .....	4 380.9

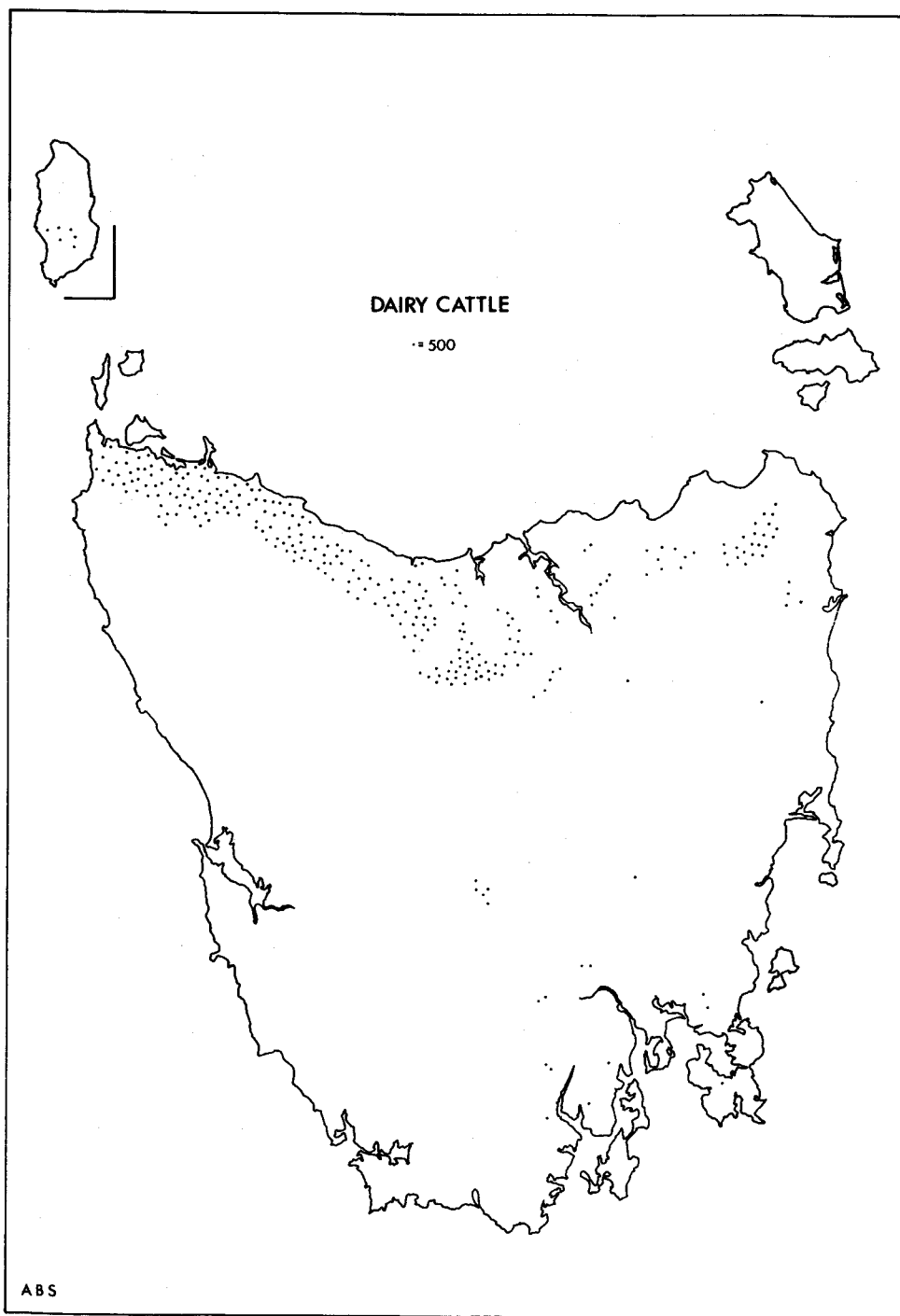
The next table shows the geographical distribution and various descriptions of sheep and also details of the lambing season:

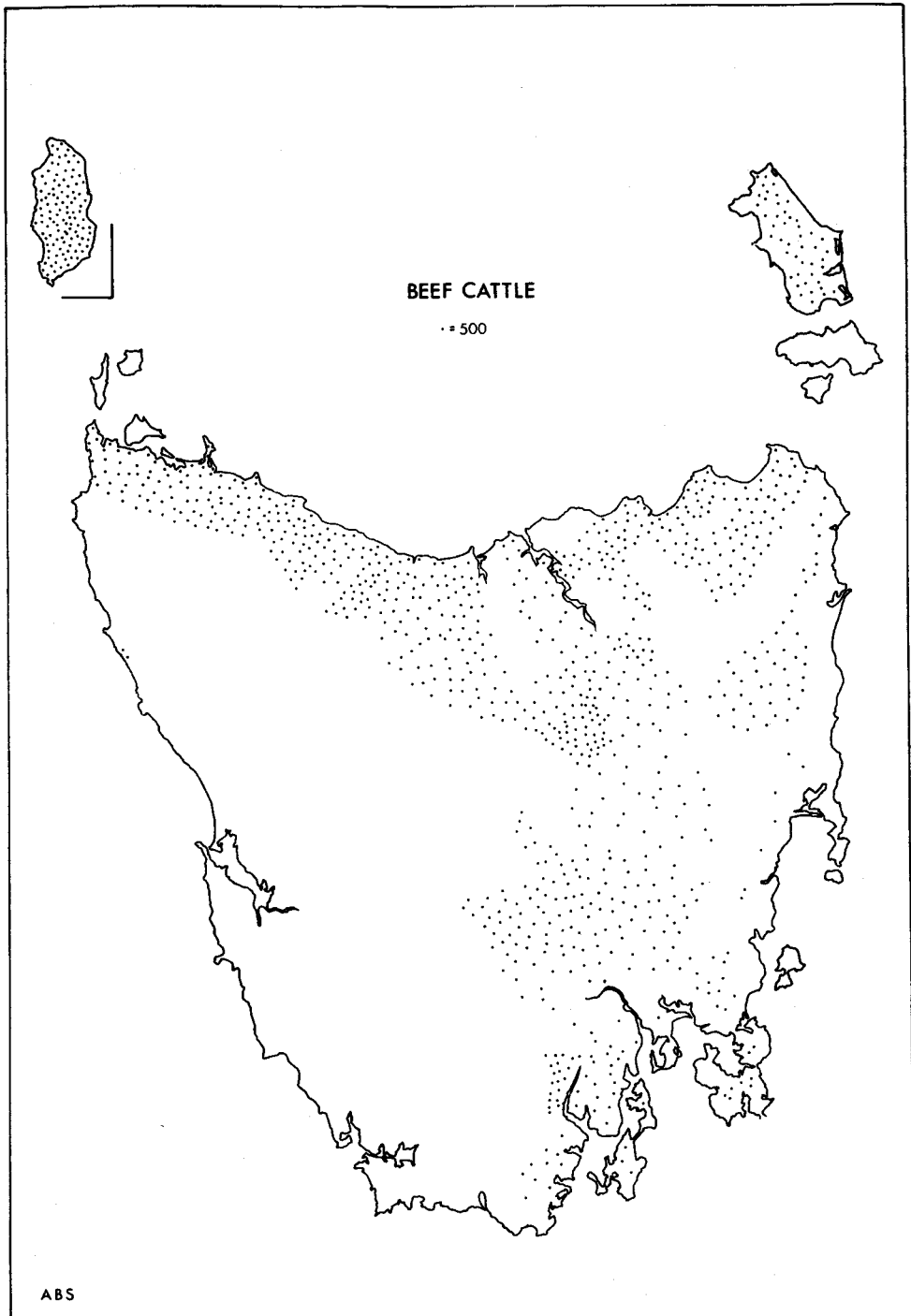
Description of Sheep at 31 March 1981 and Lambing 1980 Season, by Statistical Division

Particulars	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Establishments with sheep .....	1 033	1 021	432	1 453	863	2	865	3 351
Sheep ('000)—								
Rams (1 year and over) .....	18.9	15.6	13.0	28.6	4.9	—	4.9	52.4
Breeding ewes .....	809.4	590.4	505.7	1 096.1	186.8	—	186.8	2 092.4
Other ewes (1 year and over) .....	51.4	42.2	34.8	77.0	8.9	—	8.9	137.3
Wethers (1 year and over) .....	432.4	165.4	270.7	436.1	39.6	—	39.6	908.1
Lambs and hoggets (under 1 year) ..	437.9	335.8	305.9	641.7	111.2	—	111.2	1 190.8
Total .....	1 750.1	1 149.2	1 130.2	2 279.4	351.4	—	351.4	4 380.9
Lambing, 1980 season—								
Ewes mated .....	695.2	553.7	461.5	1 015.2	181.2	—	181.2	1 891.6
Lambs marked .....	607.1	501.2	391.8	893.0	173.5	—	173.5	1 673.6
Marking ratio (b) % ..	87.3	90.5	84.9	88.0	95.8	—	95.8	88.5

(a) Statistical sub-division.

(b) Lambs marked as percentage of ewes mated; lamb mortality is one of the factors affecting marking ratios.





The following table summarises the descriptions of sheep and gives details of lambing on a State basis:

**Description of Sheep at 31 March and Details of Lambing Summary, Tasmania**

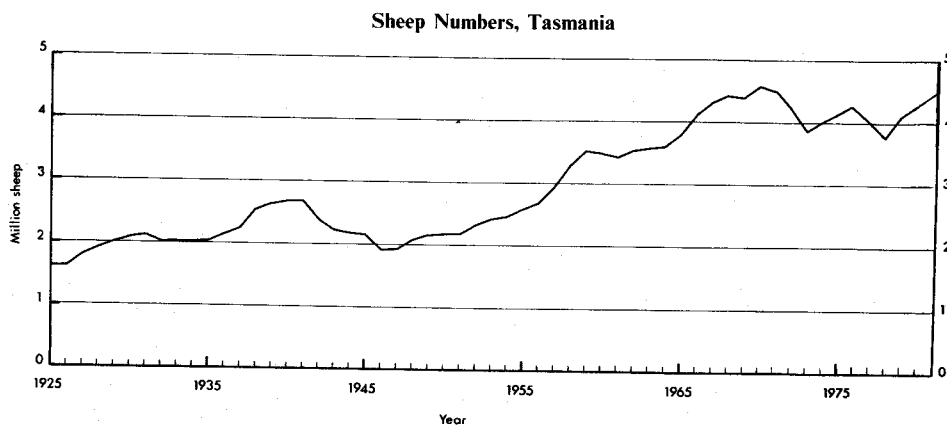
<i>Particulars</i>	1970	1975	1977	1978	1979	1980	1981
Establishments with sheep ..... no.	4 815	3 844	3 062 (a)	3 127	3 207	3 288	3 351
Sheep ('000)—							
Rams (1 year and over) .....	50	50	48	49	49	51	52
Breeding ewes .....	2 026	1 846	1 793	1 780	1 933	2 022	2 092
Other ewes (1 year and over) .....	195	209	185	174	143	127	137
Wethers (1 year and over) .....	1 064	998	1 007	923	922	889	908
Lambs and hoggets (under 1 year) .....	1 225	1 034	982	1 044	1 110	1 156	1 191
Total .....	4 560	4 136	4 015	3 969	4 157	4 245	4 381
Lambing (b)—							
Ewes mated .....	1 831	1 644	1 640	1 672	1 712	1 861	1 892
Lambs marked—							
Number ..... '000	1 715	1 466	1 378	1 529	1 582	1 706	1 674
Marking ratio (c) ..... %	93.6	89.2	84.0	91.4	92.4	91.7	88.5

(a) Not directly comparable with earlier years; see definition of 'Agricultural establishment' given earlier.

(b) In the season preceding the year named.

(c) Lambs marked as percentage of ewes mated.

The following graph shows the trend in sheep numbers since 1925 and highlights the decline in the early 1970s:



### *Breeds of Sheep*

The Merino is the mainstay of the Australian wool industry and accounts for over 75 per cent of the Australian sheep population. However, in Tasmania the predominant sheep breeds are Polwarth and Corriedale; both were originally developed from merino cross-breeds. A new sheep breed, the 'Cormo', has been developed in Tasmania to suit local conditions and to provide a highly fertile breed having a high yield of fine wool and good body conformation.

Over the past 10 years, the breeds of sheep reported by growers have shown a trend in favour of Polwarths. The following table shows the main breeds of sheep (including rams) as percentages of total sheep:

Proportion of Breeds of Sheep at 31 March, Tasmania (a)  
(Per Cent)

Breed	1968	1969	1970	1971	1974	1977	1980
Polwarth .....	40.5	41.7	42.5	43.6	44.0	42.6	43.3
Corriedale .....	18.0	17.3	15.4	14.4	13.1	12.4	12.9
Merino .....	7.1	7.7	7.9	8.9	10.7	10.5	10.6
Cormo .....	—	—	0.5	1.0	1.9	3.0	2.9
Romney Marsh .....	2.0	1.9	1.2	1.3	0.7	1.1	1.3
Other breeds .....	3.0	3.3	3.5	3.9	4.4	5.4	7.0
Comebacks .....	10.7	11.1	12.6	11.8	14.8	13.9	9.1
Cross-breeds .....	18.7	17.0	16.4	15.0	10.4	11.1	12.9
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) These data are now only available on a triennial basis.

Sheep in Tasmania are mostly run on improved pastures. However, particularly in the Midlands, use is made of considerable areas of unimproved 'run' country. The Central Plateau also provides summer grazing, particularly for wethers.

### Pigs

The geographical distribution of pigs, by statistical division, is shown in the next table:

Distribution of Pigs by Statistical Division at 31 March 1981

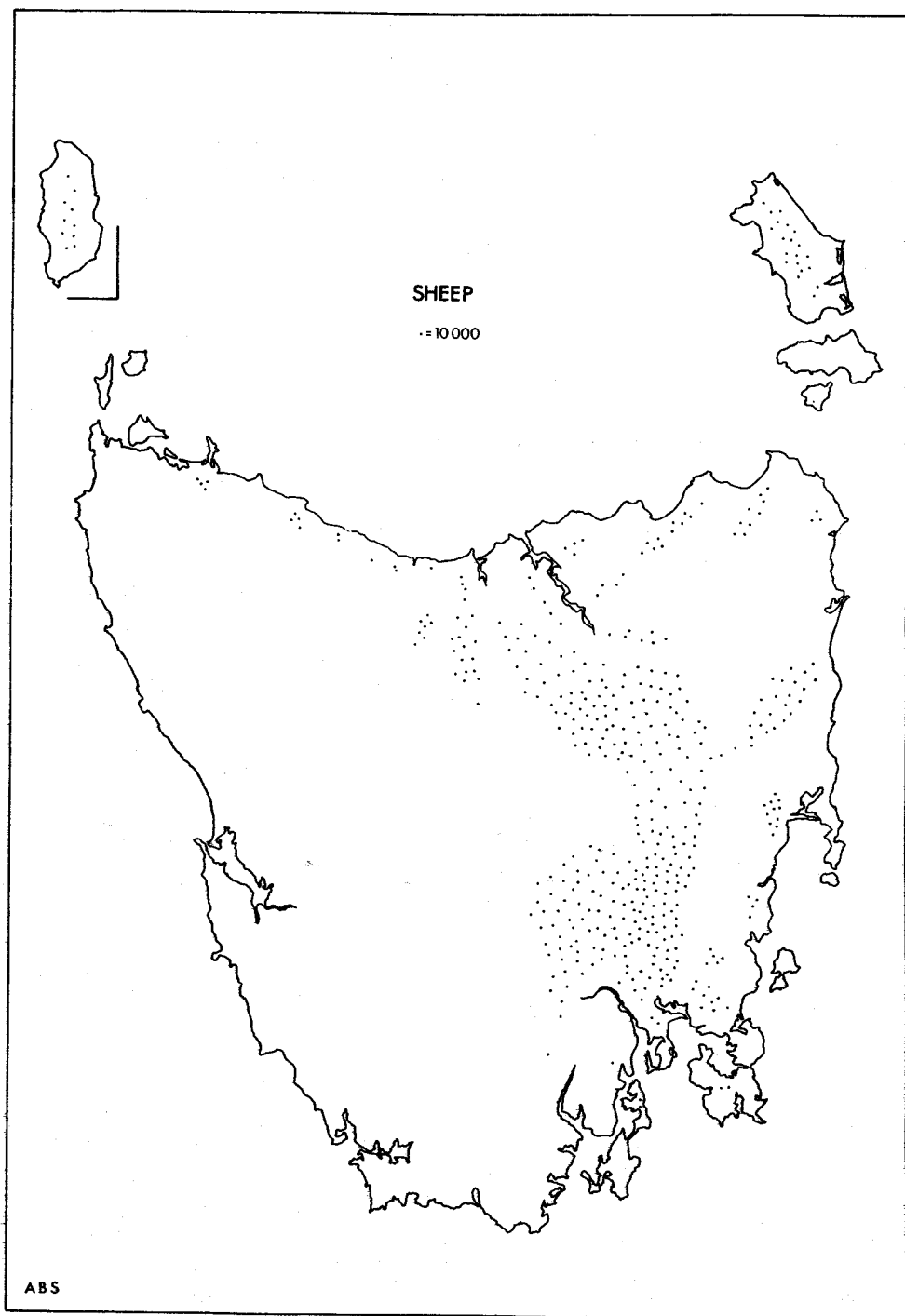
Particulars	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Establishments with pigs (no.)	139	158	60	218	210	2	212	569
Pig numbers—								
Boars .....	125	176	74	250	236	1	237	612
Breeding sows and gilts .....	1 282	1 972	1 091	3 063	3 291	5	3 296	7 641
Other (b) .....	6 031	13 058	6 404	19 462	20 708	21	20 729	46 222
Total pigs .....	7 438	15 206	7 569	22 775	24 235	27	24 262	54 475

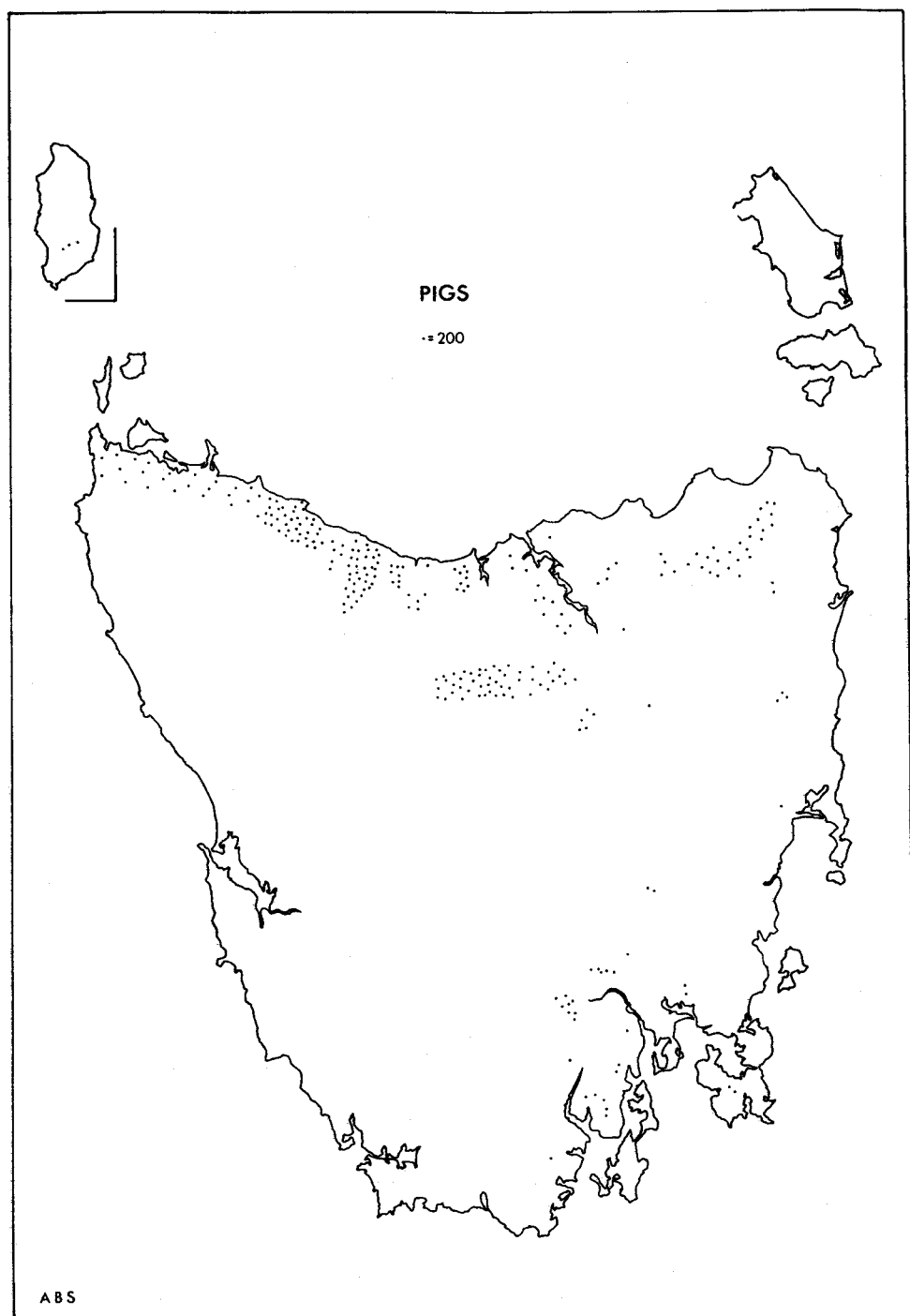
(a) Statistical sub-division.

(b) Includes baconers and porkers, backfatters, stores, weaners, suckers and slips.

The number of pigs at 31 March each year is not, in itself, a very meaningful figure. It is possible for a sow to produce two litters within the one year and for the offspring to number more than 10 in each litter. It follows, therefore, that the real measure of activity in pig-raising is not so much the size of the pig herd at a particular point in time, but rather the number of pigs slaughtered and the dressed carcass weight of the meat so produced; such information is given in the 'Livestock Products' section of this chapter.

In the previous table the most significant item is the number of breeding sows. A sow can be mated when only nine or ten months old and the gestation period is a mere four months. Piglets are weaned at four to six weeks—this early weaning calls for more skilled management but has advantages of avoiding heavy weight loss by the sow and reducing the period between litters.





The following table summarises pig numbers from 1960:

**Pigs on Agricultural Establishments at 31 March, Tasmania: Summary**

Year	Establishments with pigs	Boars	Breeding sows	Other (a)	Total pigs
1960 .....	3 681	2 075	10 730	54 313	67 118
1965 .....	3 315	2 327	14 578	75 116	92 021
1970 .....	2 302	1 978	16 629	92 668	111 275
1975 .....	1 010	976	9 243	53 754	63 973
1980 .....	690 (b)	786	8 573	54 110	63 469
1981 .....	569	612	7 641	46 222	54 475

(a) Includes baconers and porkers, backfatters, stores, weaners, suckers and slips.

(b) Not directly comparable with earlier years; see definition of 'Agricultural establishment', given earlier.

### LIVESTOCK PRODUCTS

The statistics in the following section refer, in the main, to quantities of livestock products.

#### Wool

##### Wool Production

For statistical purposes, the total amount of wool produced in the State in any year consists of not only the 'clip' (shorn wool) but also of the wool on skins, irrespective of whether it is actually removed by local fellmongers or exported on skins. Production figures for recent years are given in the next table:

**Wool Production (a) Summary**  
(\*000 kg)

Year	Shorn wool (including crutchings)	Fell- mongered wool, and wool exported on skins	Total	Year	Shorn wool (including crutchings)	Fell- mongered wool, and wool exported on skins	Total
1975-76 .....	17 962	1 989	19 951	1978-79 .....	17 442	1 636	19 079
1976-77 .....	16 174	1 935	18 109	1979-80 .....	18 193	1 810	20 003
1977-78 .....	16 950	1 974	18 924	1980-81 .....	18 091	1 958	20 049

(a) Fellmongered wool has been converted to greasy wool equivalent weight.

As illustrated in the previous table the shorn wool component has accounted for almost 90 per cent of total wool production over the last 6 years.

Total wool production of 21 861 000 kilograms in 1969-70 is the highest recorded wool output for Tasmania. During the early 1970's, uncertain economic conditions in the wool industry resulted in a substantial decline in production, but this has now recovered and wool production is steadily increasing.

##### Export of Wool

Export details for wool for recent years are given in the following table:

**Exports of Wool, Greasy (Overseas and Interstate)**  
(\*000 kg)

Year	Quantity	Year	Quantity	Year	Quantity
1972-73 .....	17 735	1975-76 .....	17 436	1978-79 .....	16 306
1973-74 .....	16 963	1976-77 .....	16 204	1979-80 .....	13 213
1974-75 .....	15 947	1977-78 .....	16 369	1980-81 .....	16 406



It should be noted that not all Tasmanian wool is exported, some being used, after scouring, etc., for manufacturing purposes within the State. Any locally processed wool exported is excluded from the previous table.

### Shorn Wool

The principal months for shearing in Tasmania are October, November and December, but during more recent years an increasing number of farmers have been shearing outside the traditional spring period. Such practices not only facilitate flock and property management but also provide more continuous employment for shearers and shed hands. The following table gives shearing details for recent years:

Shearing and Shorn Wool Obtained

Year	Numbers shorn			Shorn wool obtained			Average yield		
	Sheep	Lambs	Total	From sheep (a)	From lambs	Total	From sheep (a)	From lambs	Total
	'000	'000	'000	'000 kg	'000 kg	'000 kg	kg	kg	kg
1975-76 .....	3 579	772	4 351	16 930	1 032	17 962	4.73	1.34	4.13
1976-77 .....	3 492	737	4 229	15 247	927	16 174	4.37	1.26	3.82
1977-78 .....	3 483	759	4 242	15 947	1 003	16 950	4.58	1.32	4.00
1978-79 .....	3 508	811	4 319	16 307	1 135	17 442	4.65	1.40	4.04
1979-80 .....	3 668	882	4 550	16 978	1 215	18 193	4.63	1.38	4.00
1980-81 .....	3 659	968	4 627	16 698	1 393	18 091	4.56	1.44	3.91

(a) Includes crutchings from sheep.

In 1980-81, 54 per cent of the shorn wool produced in Tasmania came from the Northern Statistical Division; the combined Hobart and Southern Statistical Divisions and the Mersey-Lyell Division, contributed 39 and 7 per cent of the total respectively.

The next table shows the geographical distribution of shorn wool production:

Shearing and Shorn Wool Obtained (a) by Statistical Division, 1980-81

Particulars	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (b)	North Eastern (b)	Total	North Western (b)	Western (b)	Total	
Number Shorn ('000)								
Sheep .....	1 527	903	974	1 877	254	—	254	3 659
Lambs .....	301	296	272	567	100	—	100	968
Shorn Wool Obtained (tonnes)								
From—Sheep .....	6 708	4 263	4 587	8 850	1 140	—	1 140	16 698
Lambs .....	393	437	404	841	159	—	159	1 393
Total .....	7 101	4 700	4 991	9 691	1 299	—	1 299	18 091
Average Yield (c) (kg)								
Sheep .....	4.39	4.72	4.71	4.71	4.49	—	4.49	4.56
Lambs .....	1.31	1.48	1.49	1.48	1.58	—	1.58	1.44

(a) Includes crutchings from sheep.

(b) Statistical sub-division.

(c) Per sheep or lamb shorn.

### Wool Auctions

The bulk of Tasmanian shorn wool is sold to overseas buyers through auctions organised by wool-selling brokers in Hobart and Launceston. Four auction sales are held in each centre each year—in October, December, February and June, with the February sale being the most important.

In addition to wool sold at auctions, some wool is bought direct from growers by dealers and by local manufacturers of woollen goods. A small proportion of the State's wool is marketed at Victorian auctions; growers on King Island and Flinders Island tend to use this outlet because of sea transport factors.

The following table shows the average price of shorn greasy wool sold at Tasmanian auctions in selected years since World War II and also the value of all wool produced. After a period of very low prices there was an upsurge in demand in 1972-73, particularly from Japanese buyers, and prices rose strongly. High prices continued until early 1974 when, with wool users turning to alternatives, buyers were being left with large stockpiles and prices started dropping. At this time the Australian Wool Corporation was established with the administration of the flexible reserve price scheme as part of its duties. A floor price of 300 cents per kilogram for 21 micron wool on a clean basis was originally set with the Wool Corporation carrying out 'support buying'. The market declined further, however, and the minimum price dropped to 250 cents for the 1974-75 and 1975-76 seasons. Prior to the devaluation of the Australian dollar in November 1976, the floor price was set at 275 cents for the 1976-77 season. After the devaluation the price was raised to 284 cents and remained at this level for 1977-78. Since then the following floor prices have been established: 1978-79, 298 cents, 1979-80, 318 cents, and 1980-81, 365 cents per kilogram.

Tasmanian Average Auction Price and Total Value of Wool Produced

Year	Average auction price per kg of shorn greasy wool	Total value of wool produced (a)	Year	Average auction price per kg of shorn greasy wool	Total value of wool produced (a)
	cents	\$'000		cents	\$'000
1949-50 .....	131	9 530	1976-77 .....	210	34 993
1959-60 .....	114	16 508	1977-78 .....	209	36 908
1964-65 .....	109	19 050	1978-79 .....	234	42 043
1969-70 .....	88	18 081	1979-80 .....	270	50 948
1974-75 .....	137	23 890	1980-81 .....	277	50 767

(a) Includes value of shorn wool, fellmongered and dead wool and estimated value of wool exported on skins.

The preceding price series refers only to shorn greasy wool sold at auction. In arriving at the value series for all wool produced, account is taken not only of wool sold at auction but also of direct growers' sales to dealers, manufacturers and fellmongers plus the estimated value of wool exported on skins.

### Classification of Greasy Wool Sold at Auction

The following information is compiled by the Wool Statistical Service of the Australian Wool Corporation on the basis of catalogues of auction sales. Wool sold at auction is classified according to quality which is expressed in terms of average fibre diameter. This is measured in millionths of a metre (microns).

Mean Micron Analysis (a) of Greasy Wool Sold at Auction  
(Source: Australian Wool Corporation)

Average fibre diameter (mean microns)	Greasy wool sold at auction—percentage of total			
	In Tasmania		In Australia	
	1979-80	1980-81	1979-80	1980-81
Finer than 18 .....	0.5	0.6	0.4	0.3
18 .....	2.1	2.1	1.2	1.9
19 .....	2.4	2.6	4.3	4.5
20 .....	2.3	2.5	10.8	11.2
21 .....	16.6	18.3	15.8	16.5
22 .....	17.0	17.1	19.9	20.0
23 .....	11.8	11.7	13.1	11.5
24 .....	10.6	10.4	9.9	9.6
25 .....	10.3	8.4	5.7	5.4
26 .....	4.5	4.3	3.9	4.0
27 .....	5.1	4.5	3.5	3.6
28 .....	3.7	3.5	2.6	2.8
29 .....	1.0	1.1	0.5	0.6
30 .....	4.4	4.5	3.4	3.3
31 .....	0.6	0.7	0.2	0.2
32 .....	2.7	2.2	1.6	1.3
33 .....	0.2	0.2	0.1	0.1
34 .....	0.6	0.7	0.3	0.3
36 .....	0.2	0.2	0.1	0.2
38 .....	0.1	0.2	0.1	0.1
Coarser than 38 .....	—	—	—	—
Oddments .....	3.3	4.3	2.5	2.7
Total .....	100.0	100.0	100.0	100.0

(a) A micron equals one millionth of a metre; the measurement relates to fibre diameter.

While the proportion of fine wool is comparatively low in the Tasmanian clip (since the State is historically and climatically a producer of cross-bred wool), growers offering fine wool sell a high proportion of superfine merino wool at premium prices.

### Clean Wool Yield

In 1980-81 the Tasmanian proportion of auctioned greasy wool classified as 'finer than 25 mean microns' was 65 per cent, whereas the corresponding Australian proportion was 76 per cent. There is usually a difference of this order, but the Tasmanian average price is nevertheless usually a few cents above the Australian auction average. Tasmanian averages, with Australian equivalents in brackets, have been (in cents): 1974-75, 137.46 (126.99); 1975-76, 156.57 (143.25); 1976-77, 210.00 (182.73); 1977-78, 208.62 (187.14); 1978-79, 234.36 (205.24); 1979-80, 270.37 (243.57); 1980-81, 277.21 (255.97). This apparent contradiction is explained by taking into account a second factor, not included in the foregoing quality analysis, namely the yield of clean wool that can be obtained from greasy wool. In respect of this factor, Tasmanian wools tend to yield higher than Australian; both natural and artificial environmental factors operate to the advantage of the Tasmanian clip. Evidence of this peculiarity of Tasmanian wool is provided in the next table which suggests that Tasmanian wool is freer from dust and vegetable matter than wool produced in other States.

**Average Clean Yield of Wool Clip, Tasmania and Other Australian States**  
(Source: Australian Wool Corporation)

State of sale (a)	Yield of clean wool from greasy (per cent)						
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
New South Wales .....	60.54	61.06	60.78	61.28	61.46	60.62	59.41
Victoria .....	61.55	62.02	61.14	62.01	65.67	62.76	63.36
Queensland .....	59.04	58.91	58.68	59.46	59.66	58.91	58.61
Western Australia .....	57.69	58.42	57.50	56.91	57.68	58.35	58.14
South Australia .....	58.76	57.90	56.70	56.88	57.87	58.87	59.28
Tasmania .....	<b>66.21</b>	<b>67.01</b>	<b>66.86</b>	<b>67.42</b>	<b>68.17</b>	<b>67.77</b>	<b>66.45</b>
Australia .....	59.93	60.18	59.21	59.93	63.39	63.45	60.56

(a) Wool from other Australian States is not sold at Tasmanian auctions so, for Tasmania, 'State of sale' and 'State of origin' are virtually the same except that some wool from Tasmania (mainly King and Flinders Islands) is sold at Victorian auctions.

### Meat

#### *Slaughtering*

To fully record the level of meat production for human consumption, statistics are obtained in respect of operations in abattoirs, other slaughtering establishments and factories, and slaughtering on farms.

The following table summarises slaughtering activity for recent years:

**Stock Slaughtered (a) for Human Consumption, Tasmania**  
(<sup>'000</sup>)

Year	Cattle and calves				Sheep and lambs			Pigs
	Bulls, bullocks & steers	Cows and heifers	Calves	Total	Sheep	Lambs	Total	
1975-76 .....	164	119	65	348	455	614	1 069	94
1976-77 .....	145	140	73	358	469	524	993	100
1977-78 .....	161	133	69	362	387	650	1 037	92
1978-79 .....	124	103	54	281	345	503	848	91
1979-80 .....	96	83	39	218	317	613	930	89
1980-81 .....	96	86	42	224	403	647	1 050	89

(a) In all registered slaughtering establishments and on farms.

#### *Meat Production*

Statistics in terms of carcass weight covering the same field as the previous tables on slaughtering are shown in the following table. This provides a more precise measure of actual meat production and annual trends.

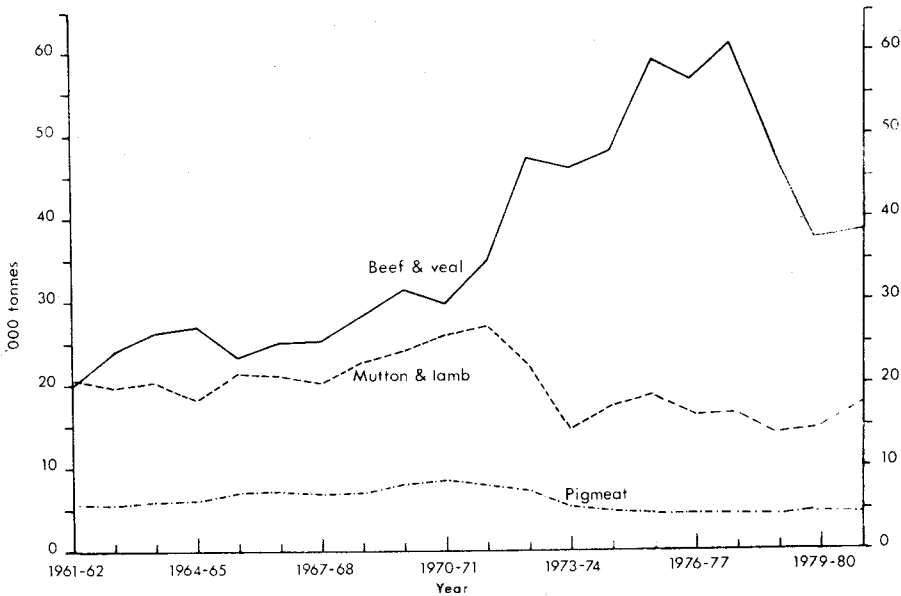
**Production of Meat, Tasmania**  
(<sup>'000</sup> tonnes—Carcass Weight)

Year	Beef and veal			Mutton and lamb			Pigmeat (a)	Total meat
	Beef	Veal	Total	Mutton	Lamb	Total		
1975-76 .....	57.9	1.2	59.2	9.0	9.8	18.8	4.5	82.5
1976-77 .....	55.8	1.6	57.4	8.5	8.2	16.7	4.9	79.0
1977-78 .....	59.8	1.6	61.3	7.0	9.8	16.9	4.8	83.0
1978-79 .....	46.3	1.2	47.4	6.8	7.9	14.7	4.8	67.0
1979-80 .....	36.6	0.8	37.4	5.6	9.0	14.7	4.9	56.9
1980-81 .....	36.8	0.9	37.7	7.4	10.0	17.4	4.8	59.9

(a) Includes pork for manufacture into bacon and ham.

In the table on meat production overleaf, the product from pig slaughtering has been referred to as 'pigmeat'. A large proportion of 'pigmeat' is converted into bacon and ham in Tasmania. 'Pigmeat' is also exported and used, in part, for producing bacon and ham in other States. The next table summarises the production of bacon and ham in Tasmania since 1975-76.

**Meat Production (Carcass Weight), Tasmania**



**Production of Bacon and Ham, Tasmania  
(Tonnes—'bone-in')**

Year	Bacon and ham	Year	Bacon and ham
1975-76 .....	2 356	1978-79 .....	2 457
1976-77 .....	2 434	1979-80 .....	2 094
1977-78 .....	2 505	1980-81 .....	2 375

### Export of Meat

The next table shows exports of edible meat from cattle, sheep and pigs by weight. Export weight cannot be directly compared with production weight since the former includes boneless meat and meat which has had its fat content reduced, while the latter is in terms of carcass weight.

**Exports of Meat, Tasmania, 1979-80  
(Tonnes)**

Destination	Beef and veal	Lamb	Mutton	Pork	Offal (edible)	Bacon and ham
Interstate .....	956	459	172	119	—	16
Overseas .....	12 411	1 386	3 245	—	852	8
Total .....	13 367	1 845	3 417	119	852	24

The importance of Tasmania's overseas meat trade can be judged from Australian Meat Board estimates of the percentage of Tasmanian production actually exported. The trends in recent years are shown by the following table:

**Proportion of Tasmanian Meat Production Exported Overseas (a)**  
(Source: Australian Meat and Livestock Corporation)  
(Per Cent)

Type of Meat	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Beef and veal .....	37.7	43.2	48.3	49.4	57.0	57.7	48.9
Mutton .....	55.0	67.8	74.1	71.4	69.1	56.1	79.7

(a) The estimated percentages are derived by converting actual export weights to a carcass weight equivalent, thus giving a basis for comparison with production figures.

### Dairy Products

The following table summarises milk production and utilisation over recent years:

**Milk Production and Milk Utilisation (a) Tasmania: Summary**

Year	Whole milk intake by factories (a)	Dairy cows at 31 March	Average annual production of milk per dairy cow (b)	Market milk sold (c)	Production		Milk used in other milk production (d)
					Butter	Cheese	
	million litres	'000	litres	million litres	tonnes	tonnes	million litres
1978-79 .....	365	110.5	3 196	59	7 075	17 494	30
1979-80 .....	316	103.2	2 955	57	5 461	15 431	31
1980-81 .....	288	98.8	2 852	56	4 234	13 905	38

(a) Source: Australian Dairy Corporation. Includes factories pasteurising market milk.

(b) The divisor for calculating the average yield is the estimated number of dairy cows which were in milk at any part of the year. Averages are, therefore, lower than for cows which were yielding during the greater part of the year. The figures given should be treated as an index rather than an actual average quantity of milk produced per dairy cow.

(c) Source: Australian Dairy Corporation.

(d) Derived by deducting the estimated whole milk equivalent of butter and cheese production, and market milk from total milk intake by factories.

### Butter

Details of production and exports of butter for recent years are given in the following table:

**Butter (a): Production and Exports, Tasmania**  
(Tonnes)

Year	Production (factory)	Net exports (b)	Year	Production (factory)	Net exports (b)
1975-76 .....	10 762	9 955	1978-79 .....	7 075	2 530
1976-77 .....	9 707	4 387	1979-80 .....	5 461	2 871
1977-78 .....	7 910	6 248	1980-81 .....	4 234	1 510

(a) Includes butter equivalent of butter oil.

(b) Net and gross are identical as there were no imports during the years shown. Includes overseas and interstate exports.

### Bee-farming

The next table, which summarises beekeeping statistics for recent years, is restricted to details from apiarists with 40 or more hives:

Bee-farming, Tasmania

Year	Apiarists	Hives	Honey produced		Beeswax produced	
			Quantity	Average per productive hive	Quantity	Average per productive hive
	no.	no.	tonnes	kg	tonnes	kg
1975-76 .....	63	10 932	626	70.1	11.7	1.31
1976-77 .....	72	12 635	553	58.1	8.2	0.86
1977-78 .....	71	12 302	759	73.3	12.4	1.20
1978-79 .....	63	12 081	684	67.3	12.3	1.21
1979-80 .....	54	12 194	568	56.7	8.5	0.85
1980-81 .....	59	12 282	669	64.6	9.1	0.88

Of the 59 apiarists with 40 or more hives in 1980-81, 25 with 100 or more hives contributed 91 per cent of the total honey produced.

Many of the larger commercial apiarists can be described as 'migratory' in the sense that they seasonally move their hives for access to leatherwood, growing in the Western Sub-division and near Lake Gordon. Leatherwood, *Eucryphia lucida*, from which a distinctively flavoured honey is produced, is unique to Tasmania. The quantity of leatherwood honey produced varies considerably from year to year depending upon the amount of blossom and weather conditions. Leatherwood honey production in 1980-81 (372 tonnes) was 39 per cent below the record level of 1977-78. It accounted for 56 per cent of total honey production in 1980-81 compared with 66 per cent the previous year and 80 per cent in 1977-78.

Tasmania is both an exporter and importer of honey. The Tasmanian market shows a preference for the clover type of honey rather than the stronger flavoured leatherwood. Considerable quantities of honey are imported from other States, both for manufacturing and for retail outlets, while much of Tasmania's production, particularly leatherwood but also clover, is exported.

The following table gives details of Tasmanian production and exports of honey. Data on imports of honey are not available for publication.

Production and Exports of Honey, Tasmania  
(<sup>000</sup> kg)

Year	Production (a)	Exports	Year	Production (a)	Exports
1975-76 .....	626	370	1978-79 .....	684	321
1976-77 .....	553	367	1979-80 .....	568	274
1977-78 .....	759	269	1980-81 .....	669	343

(a) By apiarists with 40 or more hives.

### Poultry Farming

**Household Production:** Many householders have small flocks of up to 20 birds (i.e. below the legal minimum requiring registration and payment of fees) and surveys suggest that these 'back-yard' flocks may produce up to 50 per cent of all eggs. However, no accurate statistics are available for this component and it is excluded from the tables that follow.

**Commercial Producers:** Producers with small flocks over the legal minimum size (more than 20 birds) may nevertheless keep them mainly for their own use rather than for the sale of eggs. Accordingly, producers with less than 100 birds (of all types) have been excluded from these statistics; the Bureau's 1966-67 census of the poultry industry established that producers with between 20 and 100 birds numbered 213 but owned only three per cent of the total number of hens and laying pullets in commercial flocks in Tasmania.

In 1969 there were 148 poultry farms with a total of 181 000 hens and laying pullets; by 1980 the number of farms had decreased to 47 with 200 100 hens and laying pullets and 519 600 other poultry. A size classification of the 47 farms in 1980 shows that 22 farms (only 47 per cent of farm numbers) possessed 75 per cent of laying stock.

**Poultry Numbers and Egg Production, 1979-80, Tasmania (a)**  
**Commercial Producers Only (b)**

Statistical division	Number of establishments with poultry	Poultry numbers at 30 June 1980			Eggs produced during year (c)
		Hens and laying pullets (d)	Other fowls	Ducks and drakes, turkeys and geese	
	no.	'000	'000	'000	'000 doz.
Hobart .....	8	62.8	29.7	—	1 062.2
Southern .....	22	47.5	456.4	n.p.	773.4
Northern .....	10	69.9	17.8	n.p.	1 224.0
Mersey-Lyell .....	7	19.9	14.4	n.p.	353.0
Total Tasmania .....	47	200.1	518.2	1.4	3 412.6

(a) Data were not collected for 1980-81.

(b) Relates to establishments that possessed 100 or more birds of all types at 30 June 1980.

(c) Hen and pullet eggs only.

(d) Not comparable with Egg Marketing Board series due to different definitions.

### *Poultry Slaughtering*

The trend in poultry slaughtering in recent years has been towards larger scale establishments with the growing of birds for slaughter being carried out by farmers under contract to slaughterers. The following table shows the number of poultry slaughtered during the last three years and the weight of chicken and other poultry meat produced:

**Number and Weight of Poultry Slaughtered (a), Tasmania**

Year	Number	Live weight		Dressed weight (b)	
		Total	Average per bird	Total	Average per bird
	('000)	(tonnes)	(kg)	(tonnes)	(kg)
<i>Chickens (c)</i>					
1978-79 .....	3 178	5 392	1.7	3 924	1.2
1979-80 .....	3 642	6 306	1.7	4 442	1.2
1980-81 .....	3 702	6 495	1.8	4 543	1.2
<i>Other Fowls (d)</i>					
1978-79 .....	80	176	2.2	114	1.4
1979-80 .....	101	238	2.4	144	1.4
1980-81 .....	107	254	2.4	127	1.2
<i>Ducks and Drakes, Turkeys and Geese</i>					
1978-79 .....	16	45	2.8	31	1.9
1979-80 .....	11	28	2.6	19	1.8
1980-81 .....	1	6	3.7	4	2.8

(a) Includes only establishments slaughtering 100 or more birds of all kinds.

(b) Includes weight of whole birds, pieces and giblets.

(c) Includes broilers, fryers and roasters.

(d) Hens, roosters, etc.



## TECHNICAL ASPECTS OF AGRICULTURAL INDUSTRY

## Area of Land Irrigated

*Introduction*

In 1980-81 there were only 32 748 hectares of land irrigated in Tasmania. Owing to the generally reliable rainfall in the State, scarcity of water is not such a problem as it is in the other Australian States, although quite a number of streams are not permanently flowing and drought conditions in some areas of Tasmania do occur.

*Area Irrigated*

A total of 1 582 farms reported the use of irrigation in 1980-81, an increase on the number during 1978-79 (1 270). Details of the area of crops and pastures irrigated in Tasmania in recent years are shown in the following table:

Area of Crops and Pasture Irrigated, Tasmania (a)  
(Hectares)

Year	Crops (b)				Pasture	Total
	Fruit	Potatoes	Other vegetables	Other crops		
1974-75 .....	2 605	3 105	4 271	1 582	12 123	23 686
1975-76 .....	2 158	2 720	4 627	1 729	11 071	22 305
1976-77 .....	1 944	2 938	4 955	1 963	10 463	22 263
1977-78 .....	2 002	2 985	5 918	4 940	14 148	29 993
1978-79 .....	2 116	2 976	4 800	2 101	11 327	23 320
1980-81 .....	2 493	4 109	7 195	3 975	14 976	32 748

(a) Details of irrigation were not collected in 1979-80.

(b) Excludes pasture crops which are included with 'Pasture'.

*Irrigation Methods and Sources of Water*

The main method of irrigation is by 'spray' which accounted for 71.5 per cent of the total area irrigated in 1980-81. The following table gives details of the areas of crops, etc. irrigated and the methods of irrigation used:

Methods of Irrigation, Tasmania, 1980-81  
(Hectares)

Crop or pasture irrigated	Method			Multiple and other methods	Total
	Spray	Furrow and/or flood	Trickle		
Crop—					
Fruit .....	1 620	102	553	200	2 475
Grape vines .....	10	—	8	—	18
Potatoes .....	3 744	23	—	342	4 109
Other vegetables .....	6 610	34	—	551	7 195
Other crops (a) .....	3 567	278	3	127	3 975
Pasture (incl. lucerne) .....	7 853	6 770	—	353	14 976
Total .....	23 404	7 207	564	1 573	32 748

(a) Excludes pastures harvested.

### Irrigation Schemes

#### *Cressy-Longford Irrigation Scheme*

The scheme is administered and operated by the Rivers and Water Supply Commission. It is the State's first major irrigation system, being officially opened in 1974. Situated some 30 km south of Launceston between Cressy and Longford, the Irrigation District covers about 10 000 ha of some of the oldest and most intensively farmed areas in the State.

The source of supply is the tail-race of the Poatina Power Station. Water is supplied under gravity to each farm in the constituted Irrigation District through an earthen channel system, some 94 km in length.

In 1977, following requests from landholders in the area, the scheme was extended to supply an additional nine properties around Toiberry by pumping from the North Channel. Water is delivered into individual farmer's holding dams from which they draw their requirements either by pumping or gravity at rates suitable to their particular needs.

Water from the scheme can also be discharged into the Liffey River below Bracknell and at least another twenty riparian holdings within this District can be supplied.

Each piece of land within the Irrigation District and those properties which can be supplied within the Liffey River Augmented Flow District are given an 'Irrigation Right' which is an annual entitlement to a certain quantity of water. The volume of water delivered to landowners (including those on the Liffey River) in 1982-83 amounted to 9 809 ML, which is 2 174 ML more than the previous highest usage recorded in 1981-82. The total area irrigated is also the largest to date.

The capital cost of the scheme to 30 June 1983 amounted to \$1 414 500 of which the Commonwealth provided \$750 000 in the form of a non-repayable, non-interest bearing loan.

#### *Togari Water Supply*

This scheme was constructed and administered by the Closer Settlement Board up to May, 1974.

The scheme supplies water mainly for stock and washing down dairies at Togari about 30 km. south-west of Smithton.

The total quantity of water used in 1982-83 was 90 365 kLs.

The total capital cost of the scheme at 30 June 1983, was approximately \$64 000.

### **Tasmanian Herd Improvement Organisation**

In accordance with the *Herd Improvement Act*, 1977, the Artificial Breeding Board was replaced by the Tasmanian Herd Improvement Organisation in July 1977. This new organisation took over the provision and promotion of herd improvement services, including both artificial breeding and herd recording.

In Tasmania most artificial breeding activities are undertaken by the Tasmanian Herd Improvement Organisation which operates a Semen Production Centre at Hadspen Park and seven artificial insemination centres throughout the State. Some artificial insemination services are provided by a private organisation. Approximately 85 per cent of inseminations in Tasmania are carried out with semen produced at Hadspen Park.

Because artificial breeding allows extensive use of superior bulls it has been used as an effective tool for herd improvement. From 1964 until 1977 the Artificial Breeding Board carried out dairy bull breeding programs in which genetically superior bulls were selected on the performance of their female progeny in test mated herds. These bulls have been used extensively as proven sires for large numbers of the State's dairy cows. It has been estimated that these programs have achieved a 1 per cent annual genetic gain in the State dairy herd.

Since July 1977, a young bull breeding program has been operating in Tasmania under the commercial name 'Gold Star Breeding Program'. This program involves the extensive use of semen from young bulls between 12-24 months of age and the subsequent selection of the top bulls utilized in these programs as 'Super Sires' for the breeding of future young bull teams. It is calculated that the new program has the potential to achieve annual genetic gain in the order of two per cent.

Owing to different management practices, artificial breeding has not been used so extensively in beef herds.

The following table gives details of the number of inseminations carried out by the Tasmanian Herd Improvement Organisation and the total number of cows mated by artificial breeding in Tasmania for recent years:

Artificial Breeding: Inseminations, Tasmania		
Year	Cows submitted for artificial insemination	
	Carried out by THIO	Total cows served (a)
	no.	no.
1979-80 .....	31 725	40 264
1980-81 .....	32 673	40 435
1981-82 .....	30 746	40 000
1982-83 .....	31 190	40 000

(a) Includes cows inseminated by all licensed operators (commercial organisations and owner-operators).

### Artificial Fertilisers

#### *Types of Artificial Fertiliser*

The basic types of artificial fertiliser employed are phosphatic (e.g. superphosphate), nitrogenous (e.g. sulphate of ammonia) and potassic (e.g. muriate of potash); their essential chemical contribution to plant nutrition being phosphoric oxide ( $P_2O_5$ ), nitrogen (N) and potassium oxide ( $K_2O$ ). Superphosphate, either 'straight' or with additives, is most widely used in Tasmania, the additives consisting of trace elements such as cobalt, molybdenum, copper, boron, zinc, etc. In addition to the basic fertiliser types, many combinations are also used.

#### *Usage*

The quantity of artificial fertilisers used in recent years on Tasmanian farms has changed markedly. The removal of the government bounty on superphosphate in December 1974, a substantial increase in its price and the need to reduce costs because of low prices for many farm products all contributed to a sharp drop in usage. The re-introduction of the bounty in July 1977 has assisted recovery and resulted in increased usage but the quantity applied is still substantially below the pre 1974-75 level.

Changes in government policy on bounties for the use of superphosphate have caused considerable interest in the extent of the concentration of usage. The following table shows the distribution of usage of artificial fertilisers (excluding straight nitrogenous types) according to the quantity used on establishments.

The table shows that establishments using over 50 tonnes accounted for 57.1 per cent of the quantity used in 1980-81 but represented only 13.2 per cent of the total number of establishments that used artificial fertiliser (other than straight nitrogenous types).

**Rural Establishments Classified According to the Quantity of Artificial Fertiliser  
(Other than Straight Nitrogenous Types) Used, Tasmania, 1980-81**

Particulars	Size category (tonnes used)			Total
	Up to 10	Over 10 and up to 50	Over 50	
Number of establishments .....	2 057	2 063	626	4 746
Percentage (a) .....	43.3	43.5	13.2	100.0
Quantity used (tonnes) (b) .....	10 664	51 140	82 272	144 076
Percentage (c) .....	7.4	35.5	57.1	100.0

(a) Of total establishments using fertilisers.

(b) Comprises 104 457 tonnes of superphosphate (including superphosphate with trace elements) and 39 619 tonnes of other types and mixtures.

(c) Of total fertiliser used.

The following table shows the amount of all types of artificial fertiliser used for recent years:

Artificial Fertilisers Used, Tasmania						
Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Crops—						
Area fertilised .....	ha	45 141	49 592	54 114	61 074	n.a.
Fertiliser used—Total .....	t	21 123	24 053	26 686	29 093	30 638
Per hectare .....	t	0.47	0.48	0.49	0.48	n.a.
Pastures (a)—						
Area fertilised .....	ha	244 284	343 171	429 183	528 720	622 949
Fertiliser used—Total .....	t	44 386	60 571	75 249	94 672	113 629
Per hectare .....	t	0.18	0.18	0.18	0.18	0.20
Total usage—						
Area fertilised .....	ha	289 425	392 763	483 297	589 794	n.a.
Fertiliser used .....	t	65 509	84 624	101 935	123 765	146 793

(a) 'Pastures' includes lucerne.

### ECONOMIC STATISTICS: AGRICULTURE

Economic statistics have been produced on agriculture in recent years giving a series which, from 1974-75, is comparable with the economic statistics produced for the manufacturing, mining, retail and other sectors of the economy (see Chapter 19 'Economic Censuses and Surveys').

The population identified as the basic framework for the Agricultural Finance Survey consists of all agricultural *enterprises*, i.e. all enterprises classified to an industry within sub-division 01, Agriculture, of the Australian Standard Industrial Classification (ASIC). Data connected with any non-agricultural activity of an agricultural enterprise (such as agricultural services, retailing, transport, etc.) are collected in addition to data about its agricultural activities. Any enterprise which is predominantly engaged in non-agricultural activity is out of scope of the survey.

Until 1977-78 the Agricultural Finance survey was conducted on an annual basis but from 1977-78 it has been conducted triennially.

The main items of interest from the survey for the years 1974-75 to 1977-78 are contained in the following table. Further details and an explanation of the terms used (in addition to those in Chapter 19) can be found in the Canberra Office of the Bureau publication *Agricultural Sector—Part IV Financial Statistics* (Cat. No. 7507.0).

**Financial Statistics, Agricultural Enterprises (a)**  
(\$ million)

<i>Particulars</i>	<i>1974-75</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>
Sales from crops .....	33.0	30.2	35.1	39.2
Sales from livestock .....	44.4	36.3	43.8	57.6
Sales from livestock products .....	50.5	57.3	57.7	65.1
Turnover .....	136.2	130.0	144.1	169.9
Purchases and selected expenses .....	71.3	65.2	67.8	82.4
Value added .....	67.9	66.6	77.9	87.2
Adjusted value added .....	59.1	60.2	69.2	77.4
Gross operating surplus .....	40.2	38.6	52.0	59.2
Cash operating surplus .....	30.3	26.3	41.7	49.7
Total net capital expenditure .....	16.8	15.5	18.2	19.4
Gross indebtedness .....	105.8	115.9	100.8	101.8

(a) These figures are estimates based on a sample and are therefore subject to sampling errors. 'Standard errors' indicating the reliability of each item are included in the Canberra Office of the Bureau publication 'Agricultural Sector, Part IV, Financial Statistics' (Cat. No. 7507.0).

(b) See the section 'Economic Censuses and Surveys' in Chapter 19 for definitions.

## VALUE OF AGRICULTURAL COMMODITIES PRODUCED

### Definitions

The following definitions are employed:

- (i) *Gross Value* is the value placed on recorded production at the wholesale prices realised in the market place. In cases where primary products are consumed at the place of production, or where they become raw material for a secondary industry, these points of consumption are presumed to be market places. Subsidies and bounties paid by the State, Federal and Local Governments to primary industries are, in general, included in gross value of production.
- (ii) *Marketing Costs* are the costs of moving agricultural products from the place of production to the market place. These include freight, cost of containers, commission, insurance, storage, handling and other charges necessarily incurred by the producer in delivering commodities to market.
- (iii) *Local Value* is the value placed on recorded production at the place of production and is ascertained by deducting marketing costs from the gross value of commodities produced.

### Sources of Information

The data used concerning quantity of agricultural production are supplied principally by farmers. Price and cost data are obtained from statutory authorities (e.g. Australian Wheat Board), market reports, wholesalers, brokers, auctioneers, etc., and from overseas and interstate trade statistics.

### *Period Covered*

*Crops:* Production from crops grown during the year ended 31 March.

*Other Agriculture:* Year ended 30 June.

### Value of Agricultural Products

Agriculture, for value of production purposes, is divided into: (i) crops; (ii) livestock slaughterings and other disposals; and (iii) livestock products.

*Crops*

The following table shows gross values for the crops sector for recent years:

Crops: Gross Value, Tasmania (a) (\$'000)						
<i>Crop</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Cereals for grain .....	2 261	3 999	3 000	5 007	r 3 643	5 063
Legumes mainly for grain .....	185	205	185	430	278	232
Crops for hay (a) .....	146	478	161	290	235	358
Orchard tree fruit .....	13 138	12 137	13 465	17 513	17 438	17 782
Berry and small fruit .....	794	944	1 226	1 351	r 1 782	1 446
Grapes .....	n.a.	n.a.	n.a.	11	15	30
Vegetables for sale for human consumption .....	16 355	21 358	20 573	27 202	27 547	34 700
Other crops (b) .....	4 450	7 979	11 125	16 221	r 11 275	12 366
Pasture harvested for hay .....	5 628	8 478	4 141	8 301	7 751	7 687
Pasture harvested for seed .....	52	128	85	621	433	660
<b>Total .....</b>	<b>43 009</b>	<b>55 706</b>	<b>53 961</b>	<b>r 76 947</b>	<b>r 70 397</b>	<b>80 324</b>

(a) Excludes crops and pasture harvested for green feed or silage.

(b) Excludes harvested pasture.

The next table shows quantity and value details for the main items comprising the crops sector. Also included in the table is the average value per tonne of production.

Crops: Gross Value, Tasmania 1980-81			
<i>Crop</i>	<i>Production</i>	<i>Gross value</i>	
		<i>Per tonne</i>	<i>Total</i>
	<i>tonnes</i>	<i>\$</i>	<i>\$'000</i>
Crops (excluding pasture harvested)—			
Cereals for grain—			
Barley .....	18 307	149.77	2 742
Oats .....	11 146	163.17	1 819
Triticale .....	11 151	127.17	146
Wheat .....	2 545	139.40	355
Total cereals for grain .....	..	..	(a) 5 063
Legumes mainly for grain—			
Peas, field .....	795	240.69	191
Total legumes mainly for grain .....	..	..	(a) 232
Crops for hay (b) .....	7 531	47.59	358
Fruit—			
Orchard tree fruit—			
Apples .....	76 033	219.72	(c) 16 706
Pears .....	2 095	351.77	737
Total orchard tree fruit .....	..	..	(a) 17 782
Berry and small fruit—			
Currants .....	772	800.75	618
Loganberries .....	126	921.91	116
Raspberries .....	416	1 079.48	449
Strawberries .....	131	1 950.00	256
Total berry and small fruit .....	..	..	(a) 1 446
Grapes .....	11	265.00	30

*continued next page*

## Crops: Gross Value, Tasmania 1980-81—continued

Crop	Production tonnes	Gross value	
		Per tonne \$	Total \$'000
Vegetables for sale for human consumption—			
Beans, French and runner .....	10 319	179.89	1 856
Peas, green (ex-shell) .....	26 552	177.36	4 710
Potatoes .....	155 965	110.19	17 186
Total vegetables for human consumption .....	..	..	(a) 34 700
Other crops—			
Hops (dry weight) .....	1 558	3002.34	4 678
Other .....	..	..	7 688
Total other crops .....	..	..	12 366
Total (excluding crops from pasture) ..	..	..	71 977
Pasture (including lucerne) harvested—			
Pasture harvested for—Hay .....	241 817	31.79	7 687
Seed .....	575	..	660
Total crops from pasture .....	..	..	8 347
Total all crops .....	..	..	80 324

(a) Includes other crops not specified in the table.

(b) Excludes pasture for hay.

(c) Includes stabilisation payments of *minus* \$204 000 and \$94 000 for payments under the *Apple Industry Assistance Act*.(d) Includes net payments to growers under Government price support schemes of *plus* \$3 273 000.

(e) Includes lucerne.

**Average Unit Gross Values:** In the next table, average unit gross values for the principal crops are shown for a six-year period. The unit values have been calculated for the principal agricultural products by dividing the total quantity produced into the total gross value of production for each crop. They therefore represent weighted average 'prices' of the product in all markets (including quantities retained for farm use) and indicate trends rather than prices actually paid to farmers.

Average Unit Gross Values: Principal Crops, Tasmania  
(\$ per tonne)

Crop	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Cereals for grain—						
Barley .....	99	111	121	122	124	150
Oats .....	79	108	123	118	118	163
Triticale .....	..	..	..	..	120	127
Wheat .....	97	82	86	109	128	139
Legumes mainly for grain—						
Peas, field .....	155	180	204	197	210	241
Crops for hay .....	29	50	27	31	38	48
Vegetables for sale for human consumption—						
Beans, French and runner .....	117	125	133	142	152	180
Peas, green (ex-shell) .....	147	156	158	158	159	177
Potatoes .....	77	83	83	102	104	110

continued next page

**Average Unit Gross Values: Principal Crops, Tasmania**  
(\$ per tonne)—*continued*

<i>Crop</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
<b>Orchard tree fruit—</b>						
Apples .....	173	165	202	195	223	220
Apricots .....	224	217	307	341	453	745
Pears .....	171	195	261	248	284	352
Grapes .....	n.a.	n.a.	n.a.	260	262	265
<b>Berry and small fruit—</b>						
Currants .....	500	550	700	722	780	801
Gooseberries .....	320	440	500	500	520	553
Loganberries .....	470	570	730	780	820	922
Raspberries .....	500	580	740	870	953	1 079
Strawberries .....	1 600	1 550	1 650	1 680	1 726	1 950
Hops .....	1 395	1 695	1 957	2 202	2 553	3 002
<b>Pasture—</b>						
Hay .....	17	25	25	28	32	32
Seed—rye grass .....	327	497	520	700	860	980

*Livestock Slaughterings and other Disposals*

For the main categories of livestock, the first of the next two tables shows the gross value of production (including an adjustment for net exports), and the second table the average prices paid to farmers for livestock sold for slaughter.

**Livestock Slaughterings and Other Disposals (a): Gross Value, Tasmania**  
(\$'000)

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Cattle and calves .....	20 740	27 686	33 915	60 713	65 462	56 599
Sheep and lambs .....	5 710	9 565	11 655	20 455	21 384	23 451
Pigs .....	5 481	6 028	5 790	6 378	8 023	7 928
Poultry .....	2 121	2 824	3 416	4 191	4 903	5 926
Goats .....	n.a.	n.a.	n.a.	n.a.	560	176
<b>Total .....</b>	<b>34 052</b>	<b>46 103</b>	<b>54 776</b>	<b>91 737</b>	<b>100 332</b>	<b>94 080</b>

(a) Includes an adjustment for net export of live animals.

**Average Livestock Prices, Tasmania (a)**  
(\$)

<i>Livestock</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Cattle (other than calves) .....	71.24	90.10	103.55	240.39	337.14	282.14
Sheep .....	2.75	5.76	7.67	14.46	12.09	13.09
Lambs .....	8.10	11.49	12.05	18.58	21.59	20.07
Pigs .....	58.27	60.11	62.37	69.67	90.25	89.32

(a) Estimated average prices, on the hoof, of livestock sold for slaughter.

*Livestock Products*

A wide range of goods are manufactured in Tasmanian factories from livestock products. The two major products, wool and milk, in terms of gross value, accounted for 51 and 44 per cent of the total respectively, in 1980-81.

Details of gross values for livestock products for years 1975-76 to 1980-81 are shown on the next page:





*Harvesting potatoes at Wilmot, North-West Tasmania*

[Copyright Edward Gall]

*Sheep grazing near Scottsdale, North-East Tasmania*





*Field of processing peas at Sassafras, North-West Tasmania*  
[Copyright Edward Gall]





**Livestock Products: Gross Value, Tasmania**  
(S'000)

<i>Particulars</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Wool—						
Shorn (including crutchings) .....	27 139	33 000	34 559	39 867	47 725	49 257
Fellmongered and exported on skins ..	1 281	1 993	2 349	2 175	3 224	1 509
Total .....	28 420	34 993	36 908	42 043	50 948	50 767
Dairy products, whole milk used for—						
Processing .....	21 085	24 462	26 102	32 346	30 092	34 581
Human consumption and other purposes .....	7 669	8 601	8 693	7 7892	8 287	9 219
Total dairy products .....	28 754	33 063	34 795	40 238	38 379	43 800
Eggs .....	3 031	3 595	3 751	3 815	3 795	4 947
Honey .....	446	410	623	613	517	665
Beeswax .....	21	14	31	35	35	40
Total livestock products .....	60 672	72 075	76 108	86 744	93 674	100 219

**Value of Agricultural Products: Summary**

In the table that follows *gross* and *local* values of production for all agricultural commodities are shown for the last six years:

**Agricultural Commodities Produced: Gross and Local Value, Tasmania**  
(S'000)

<i>Particulars</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Crops (a)</i>						
Gross value of production .....	43 009	55 706	53 961	76 936	70 397	80 324
Less Marketing costs .....	7 779	7 003	6 114	8 176	8 741	9 226
Local value of production .....	35 230	48 703	47 847	68 760	61 656	71 098
<i>Livestock Slaughtering and other Disposals</i>						
Gross value of production .....	34 052	46 103	54 776	91 737	100 332	94 080
Less Marketing costs .....	3 010	3 904	6 921	11 540	12 960	11 685
Local value of production .....	31 042	42 199	47 855	80 197	87 372	82 395
<i>Livestock Products</i>						
Gross value of production .....	60 672	72 075	76 108	86 744	93 674	100 219
Less Marketing costs .....	3 681	3 899	3 953	4 087	4 673	5 115
Local value of production .....	56 991	68 176	72 155	82 657	89 001	95 104
<i>Total Agriculture (a)</i>						
Gross value of production .....	137 733	173 884	184 845	255 417	264 403	274 623
Less Marketing costs .....	14 470	14 806	16 988	23 803	26 374	26 026
Local value of production .....	123 263	159 078	167 857	231 614	238 029	248 597

(a) Excludes crops and pastures harvested for green feed and silage. No adjustment has been made to reduce totals in respect of intermediate production crops (e.g. stock feed) used on the holdings on which produced and not sold.

## DEPARTMENT OF AGRICULTURE, TASMANIA

The functions of the Department of Agriculture are broadly three-fold: regulation, extension or advice, and research.

The regulatory function is the administration of laws relating to agricultural production and the protection of the health of livestock and crops. It includes the operation of port inspection and quarantine facilities and responsibility for the development of policy and continuing review of the Acts and Regulations.

In the performance of its extension function the Department provides information and advice on all aspects of agricultural production, and encourages the adoption of proven agricultural practices to increase efficiency. Specialist officers in the Department report on aspects of Tasmanian agriculture to parliamentary or other commissions and inquiries.

Research is undertaken at research centres in Hobart, Launceston and Devonport and at five research stations in various parts of the State. This research provides the scientific basis for the extension and regulation functions.

The Department is administered by an operational Board of Management comprising the Secretary, who is the Head of the Department, and the heads of the five operational Services with responsibilities in the area of plants, animals, planning and co-ordination, resources and administration. The Head Office is in Hobart, and there are offices in each of fifteen districts covering the whole State, including the Bass Strait Islands.

Total expenditure by the Department of Agriculture from Consolidated Revenue in 1981-82 was \$13.3 million, compared with \$12.1 million in 1980-81.

## GOVERNMENT FINANCIAL ASSISTANCE TO RURAL PRODUCERS

### Tasmanian Development Authority

In November 1983, Parliament passed the *Tasmanian Development Act 1983* which, in addition to its objectives to assist industry and provide a balanced economy in the State, set up the Tasmanian Development Authority which will continue to perform the lending role previously undertaken by the Agricultural Bank. The Authority maintains a commitment to assist primary industry as well as secondary and tertiary development.

General agricultural industry support which includes refinance lending from the Primary Industry Bank of Australia Limited is available to rural producers. The assistance is long term finance to complement existing sources of funds. In particular, developmental proposals which may include new and innovative techniques not usually accommodated by commercial lenders will be considered.

Funds are provided for property purchase, refinancing of liabilities, land development, purchase of stock and plant, structural improvements and water storage and irrigation.

Assistance to the fishing industry is also available for the construction and purchase of fishing vessels, for the purchase of equipment and for vessel modification.

Total approvals for the financial year 1982-83 to the rural and fishing industries amounted to \$7.246 million, representing 232 loans.

### Young Farmer Establishment Finance Scheme

The scheme is a program of financial assistance directed at assisting young applicants with high personal attributes to progress towards the ultimate goal of full-time farming operations. Established in 1983, it has been developed as a complementary lending function to the Closer Settlement Scheme. Applicants for stock and equipment finance, stepping stone finance and deposit gap finance should be employed in occupations closely allied to farming such as farm managers, sharefarmers, shearers, etc.

During the financial year 1982-83, nine young farmers were assisted with loans totalling \$361 300.

### **Closer Settlement Scheme**

Under the provisions of the *Closer Settlement Act 1957*, the Tasmanian Development Authority is able to purchase viable farming properties for subsequent leasing to eligible young persons. The initial period of tenure is on concessional terms before transfer to settlement lease on full commitments. The applicant is expected to have a farming background and to have acquired equity such as cash, land, stock or plant of sufficient value to reduce commitments to a level which the applicant is able to meet when on settlement lease.

During the financial year 1982-83, 15 properties were purchased for a total expenditure of \$2.17 million.

### **War Service Land Settlement**

In 1944-45, the Federal and State Governments reached agreement on a scheme for the settlement of ex-servicemen on farming properties. Large areas of land were inspected and subsequently over 180 000 hectares were purchased for development and allotment to ex-servicemen. All holdings have been allotted as grants in perpetuity at a pre-determined rental. After a period of six years the settler may, subject to conditions laid down in the Act, exercise the right to convert the property to a freehold title by payment of an option price. He may transfer his interest in the holding to a person not entitled to receive an allotment under the eligibility criteria of the scheme.

At 30 June 1983, 96 properties developed under the scheme were occupied by the original settlers. A further 115 settlers have exercised their option to purchase the freehold of their properties and 268 properties were tenanted by persons other than the original ex-servicemen.

### **Primary Producers' Relief**

The Tasmanian Development Authority is the agency through which Government channels special assistance, both loan and grant, to rural industries which have been affected by hardship as a result of natural disasters such as drought, fires, frost, hail and floods. In July 1979 following a prolonged period of dry weather in the south east and east of the State, the State Government provided assistance to primary producers in areas declared as drought affected under the provisions of the *Primary Producers' Relief Act 1968*.

Loans for carry-on assistance, restocking and resowing have been made available to many farmers who were seriously affected by the drought conditions. Subsidies for agistment, purchase of fodder, sheep slaughter, crop compensation, cartage of water, were provided by the State Government. The Commonwealth Government provided a subsidy for the purchase of fodder as well as a subsidy for interest payments.

In the financial year 1982-83, 101 loans for carry-on finance, restocking and resowing were approved for a total value of \$1.675 million. Total grants, both State and Commonwealth exceeded \$2 million.

### **Rural Adjustment Scheme**

On 4 June 1971 an agreement was signed between the Commonwealth Government and the State Government, the objective being the implementation of a national scheme of rural reconstruction. In essence, the Commonwealth Government provides the financial assistance but the detailed administration is vested in the State.

As from 1 January 1977 a further agreement between the Federal and State Governments provided for a Rural Adjustment Scheme. The agreement combined into one comprehensive scheme the various forms of rural adjustment which previously had been provided under separate legislation, namely, the *Rural Adjustment Act 1971*, the *Dairy Adjustment Program Act 1975* and the *Beef Industry Assistance Act 1975*.

Forms of assistance available under the scheme include debt reconstruction, farm build-up, farm improvement, carry-on assistance, rehabilitation assistance and household support. The general principle to be applied is to distribute available resources as widely as practicable but the overriding objective is to help restore to economic viability those farms and farmers with the capacity to maintain viability once achieved.

In the financial year 1982-83, eight applications were approved for a total expenditure of \$407 000.

### Apple Industry Assistance

Following a report of the Industry Assistance Commission on Apples and Pears No 239 of 28 March 1980, the Commonwealth and State Governments agreed to provide and fund on a dollar for dollar basis a scheme whereby grants for price support would continue to be made in respect of apples grown in the State and exported at risk to the United Kingdom and Europe and to provide grant funds for the restructure of the apple industry. The State Parliament passed legislation in December 1981 known as the *Apple Industry Assistance Act 1981*.

Funds are provided over a period of four years commencing from 1 July 1981 for supplementary assistance in the form of price support, orchard adjustment, and for approved research conducted by officers of the Department of Agriculture. Demands from growers in respect of orchard adjustment have been forthcoming at a steady rate.

Up to 30 June 1983 approvals totalling \$824 000 had been allocated for orchard restructure and \$1.63 million had been expended on price support for the same period.

### Further References

#### *ABS Publications Produced by the Tasmanian Office*

Principal Agricultural Commodities, Tasmania (Preliminary) (7111.6), annual.  
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 Crops and Pastures, Tasmania (7321.6), annual.  
 Apples and Pears in Cool Stores, Tasmania, monthly, seasonal; June to November.  
 Fruit, Tasmania (7322.6), annual.  
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 Value of Agricultural Commodities Produced, Tasmania (7501.6), annual.

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Agricultural Industries Structure of Operating Units (7102.0), annual.  
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 Cereal Grains: Estimates of Intended Sowings (7304.0), annual.  
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 Agricultural Industries: Financial Statistics, Australia (7507.0), annual.  
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## CHAPTER 13

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## Chapter 13

### FORESTRY, MINING AND FISHERIES

#### FORESTRY

##### Introduction

When the first explorers ventured beyond the main coastal areas of mainland Australia, they encountered arid zones and desert nearly devoid of timber. By contrast, in Tasmania dense and continuous forest was the main barrier to early penetration, although the early settlements were sited in open savanna-like country which originated from firing by the Tasmanian aboriginals. No other Australian State has similar widespread conditions favourable for forest growth: a cool temperate climate; and an assured annual rainfall varying from 500 to 3 800 millimetres according to locality, and showing relatively small seasonal variation.

During the period since the first settlement in 1803, land clearing, timber exploitation and fires have left their mark; however the Forestry Commission estimates that the current total forest area (including some forest of little or no commercial value) is 2 779 000 hectares (i.e. about 40 per cent of the State's total area of 68 300 sq km).

##### Forest Area

Of all the Australian States, Tasmania is unique in its concentration of forest resources. Native forests of potentially commercial quality cover 2 214 000 hectares (or 32 per cent of the State's area). Of this area 905 000 hectares are privately owned and 1 309 000 hectares are Crown-owned commercial forests.

The need for permanent reservation of land for timber production was first officially recognised by the *Waste Lands Act* 1881 and the first forest reservation occurred in the late 1880s when some 21 270 hectares were gazetted. Reservations had reached 403 660 hectares by 1910 and 651 890 hectares at the time of World War II. The Commission has an on-going program of acquiring land suitable for dedication as State forest. The gazetted area at 30 June 1983 was 1 552 695 hectares towards a target of 1 618 000 hectares of permanent State-owned forests managed for the benefit, both material and environmental, of future generations. In addition to the State forests there are 'timber reserves' (land reserved for the supply of timber, including fuel); at 30 June 1983 the forested area of State forest and timber reserves was 1 587 380 hectares.

The State forests are located, in the main, in five distinct regions: (i) far north-west about the axis of the Arthur River; (ii) north-eastern highlands; (iii) north and north-west of the Great Lake; (iv) from the south coast, north to Lake King William; and (v) the east coast area.

##### *Classification of State Forests and Timber Reserves*

A classification of State forests, timber reserves and land acquired for forestry purposes is set out in the following table:



**Classification of State Forests and Timber Reserves, Tasmania at 30 June 1983**  
(<sup>'000 Hectares</sup>)

<i>Forest type</i>	<i>Area</i>
Eucalypt forest with a mature or potential mature height over 41 m .....	379
Eucalypt forest with a mature or potential mature height of 15m to 41m .....	723
Temperate rain forest ( <i>N. cunninghamii</i> ) and associated species .....	170
Plantations — Softwood (mainly <i>pinus radiata</i> ) .....	35
— Hardwood .....	2
Total productive forest area .....	1 309
Non-productive forests and other land included for protection purposes .....	278
Total .....	1 587

**Timber Concession and Reserve Areas**

The establishment in Tasmania of various industries using forest resources has given rise to the need for some guarantee of assured timber supplies to those industries. Therefore, certain concessions and cutting rights on Crown Lands have been awarded to companies relying on forest products as their raw materials. The map on the following page shows the location of concession and reserve areas in Tasmania. Cutting rights apply only to Crown Land and State forest within the boundaries. Concession areas are those areas where a company is at present allowed to operate while reserve areas are set aside for future use. Providing that the company meets certain stipulated conditions, permission to remove timber from the reserve area will be granted by the Forestry Commission.

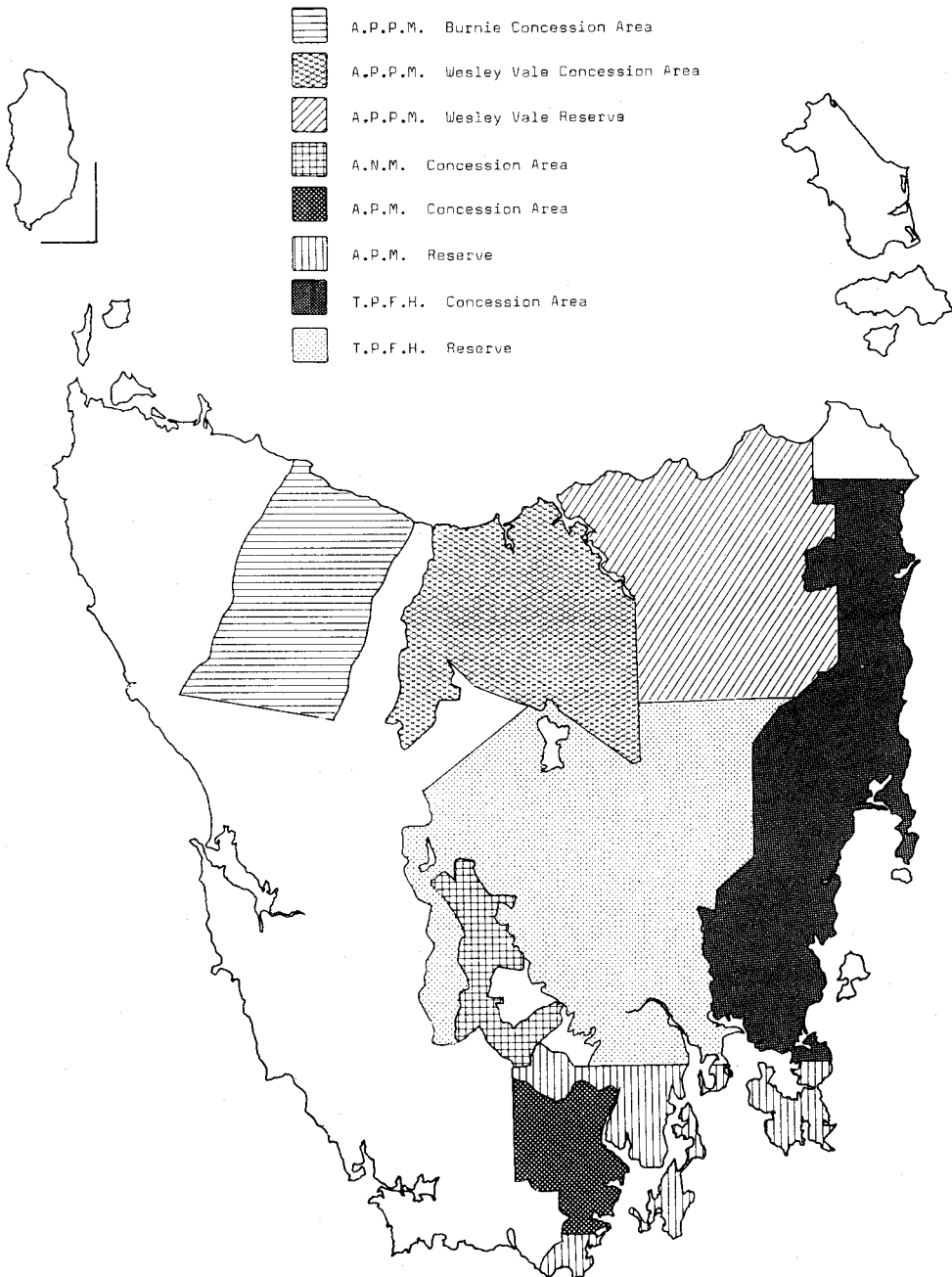
**Plantations**

The scarcity of native softwoods is being met, in part, by the creation of exotic plantations, the principal species grown being *Pinus radiata*. At 30 June 1982 softwood plantations (57 000 hectares) accounted for only 2 per cent of the State's total forested area. The Forestry Commission had established 35 000 hectares of softwood plantations in Tasmania by 31 March 1983.

The following table shows the area of softwood and hardwood plantations established by the Forestry Commission (but excludes privately owned areas):

**Area of Forestry Commission Plantations, Tasmania at 31 March**  
(Hectares)

<i>District</i>	<i>1982</i>			<i>1983</i>		
	<i>Softwood</i>	<i>Hardwood</i>	<i>Total</i>	<i>Softwood</i>	<i>Hardwood</i>	<i>Total</i>
Smithton .....	9	—	9	9	—	9
Burnie .....	3 166	292	3 458	3 305	293	3 598
Devonport .....	7 073	40	7 113	7 386	39	7 425
Queenstown .....	1 729	1	1 730	1 675	6	1 681
Launceston .....	1 006	130	1 136	1 158	172	1 330
Deloraine .....	2	269	271	3	366	369
Scottsdale .....	9 273	62	9 335	9 331	94	9 425
Fingal .....	12 091	68	12 159	12 227	56	12 283
Triabunna .....	—	91	91	—	91	91
Geeveston .....	98	498	596	99	535	634
New Norfolk .....	n.a.	n.a.	n.a.	168	—	168
Total .....	34 447	1 451	35 898	35 361	1 652	37 013

**PULPWOOD CONCESSION AREAS (a)**

(a) Cutting rights apply only to Crown Land and State Forests within these boundaries.

### Tasmanian Forest Types

The productive, commercially harvested native forest estate consists of three main vegetation types: dry sclerophyll, wet sclerophyll and mixed forest (sclerophyll means hard leaved, i.e. eucalypt). Dry forest occurs predominantly on the east coast, wet sclerophyll in the north west and north east highlands. Mixed forest consisting of eucalypts with rainforest understorey species occurs where rainfall is above 1130 mm p.a. Rainforest is characterised by the dominance of myrtle (*Nothofagus cunninghamii*), sassafras (*Atherosperma moschatum*) and leatherwood (*Eucryphia lucida*). No timber harvesting operations occur in stands of pure rainforest. Blackwood (*Acacia melanoxylon*) grows where rainforest has been disturbed in the past, principally by fires. The main blackwood areas are in the north-west around Smithton.

Good quality eucalypt forests are uncommon on soils of reasonable depth and fertility where the annual rainfall is below 760 mm. Where the rainfall is above 1130 mm, rain forest species appear in the understorey but are excluded should fires occur, say, every 40 to 50 years. With rainfall above 1520 mm rain forests can exclude eucalypts. However, even with rainfall well above 1520 mm, a combination of poor soils and frequent burning often produces areas of button grass and heathy plains.

Tasmanian forests are cut almost exclusively for hardwood (eucalypts), the slow growing native softwoods never having been very plentiful. The principal softwood species which have been utilised are *Athrotaxis selaginoides* (King Billy pine), *Lagarostrobos* (formerly *Dacrydium*), franklinii (Huon pine) and *Phyllocladus aspleniifolius* (Celery-Top pine).

**Hardwoods:** The most valuable eucalypts are those which belong to the so-called ash group—*E. obliqua* (stringy-bark), *E. delegatensis* (gum-top stringy-bark or alpine ash) and *E. regnans* (swamp gum or mountain ash). In the south and south-east *E. globulus* (Tasmanian blue gum) occurs in high quality forests. In areas where the annual rainfall is below 760 mm, the more important eucalypts are *E. amygdalina* (black peppermint), *E. ovata* (swamp or black gum), *E. viminalis* (white gum), *E. obliqua* (stringy-bark) and *E. linearis* (white peppermint).

Tasmania offers 11 tree types suitable for pulpwood, of which 10 are eucalypts. The eleventh is the myrtle (*Nothofagus cunninghamii*), a rain forest hardwood available in the north-west of the island. The eucalypts can be graded into:

- |  |  |
|--|--|
| (i) First quality (four species)—          | <i>E. obliqua</i> (stringy-bark) (a) (b)<br><i>E. delegatensis</i> (gum-top stringy-bark) (a) (b)<br><i>E. regnans</i> (swamp gum) (b)<br><i>E. sieberi</i> (ironbark) |
| (ii) Second quality (three 'gums')—        | <i>E. viminalis</i> (white gum) (a) (b)<br><i>E. globulus</i> (blue gum) (a)<br><i>E. ovata</i> (swamp or black gum) (b)   |
| (iii) Third quality (three 'peppermints')— | <i>E. amygdalina</i> (black peppermint) (a) (b)<br><i>E. linearis</i> (white peppermint)<br><i>E. tasmanica</i> (silver peppermint)                                    |

Two species of eucalypt—*E. delegatensis* and *E. obliqua* account for over 60 per cent of all eucalypt logs cut for woodchipping. The east coast offers all 10 varieties of which the five marked (a) are the common ones. The north coast offers, in useful quantity, only the six varieties marked (b).

**Softwoods:** Although Tasmania's native forests produce some very valuable softwood timber, these are very slow growing and in short supply. For this and other reasons, attention has been given to building up another section of the total forest estate—namely, plantations of exotic species, particularly *Pinus radiata*. At March 1983 there were just over 35 000 hectares of State owned pine plantations with another 22 000 hectares on private land.

## Forest Utilisation

### Introduction

An extensive sawmilling industry has been a major and traditional part of the Tasmanian scene since the mid 19th century. This was originally an industry solely reliant on native forests for its raw material, although now (and in the future) plantations of exotic softwoods play an important role in supplying the industry. For a number of years usage of logs for sawing, peeling and slicing remained at over 1 000 000 cubic metres per annum but usage has dropped since 1974-75 to a level of 647 000 cubic metres in 1982-83, when 236 000 cubic metres of sawn, peeled and sliced timber was produced.

However, typical native forests produce much wood which is not suitable for sawmilling and in 1937 a start was made on the use of this previously wasted resource for the manufacture of paper at Burnie. Since that time, the use of pulpwood has expanded, particularly in the present decade, producing pulp paper, building panel-boards and raw woodchips. In 1941 the only newsprint mill in Australia was established at Boyer on the Derwent; in 1962, a pulp mill began operations at Port Huon in the south. A further pulp and paper mill commenced production during 1970 at Wesley Vale near Devonport. Further utilisation of forestry products has been introduced by factories producing plywood, hardboard, particle board and woodchips (for export).

Establishment of the woodchip industry and the expansion of other timber-using industries has resulted in greatly increased annual timber requirements necessitating careful utilisation of existing forest resources and the development of viable reafforestation schemes.

The problem of possible overtaxing of existing resources has been met partly by the implementation of fully integrated forest operations wherever possible. These operations ensure maximum use of the resource, with the best logs going to sawlogs and the remaining merchantable timber being processed as pulpwood. This also facilitates regeneration of the forest as most of the standing trees are removed, hence decreasing competition for available nutrients and light.

Pulpwood is also obtained from waste produced during sawmilling. During 1969-70, the year preceding the first export of woodchips, approximately 25 per cent of sawmill waste was chipped for re-use. As a direct consequence of the woodchip export trade the proportion rose to over 60 per cent in 1976-77 and had reached nearly 80 per cent in 1979-80.

Thinnings from Forestry Commission *Pinus radiata* plantations are used for sawlogs, treated fence posts, particle board manufacture at Wesley Vale and production of pulp for manufacture of paper at Burnie, Wesley Vale and Boyer.

Regeneration of harvested areas is carried out by the Forestry Commission and by the companies themselves. Every hectare of forest harvested on Crown land is regenerated, the work in some areas being done by the companies and in other areas by the Forestry Commission. Industries utilising privately owned forest resources have established incentive schemes to encourage reforestation.

### Total Log Usage

The next table shows total log usage by the sawmilling, paper making, chipping and allied industries for recent years:

Hardwood and Softwood Log Usage, Tasmania  
(<sup>000m</sup>)

Year	Sawmilling and plywood milling	Chipping, grind- ing and flaking	Total
1977-78 .....	906	2 751	3 658
1978-79 .....	863	2 941	3 803
1979-80 .....	942	3 594	4 536
1980-81 .....	992	3 370	4 362
1981-82 .....	863	3 071	3 933
1982-83 .....	647	3 182	3 829

### Timber Using Industries

Normally the Bureau does not publish information relating to any single enterprise or establishment but only publishes statistical aggregates where these do not directly or indirectly reveal the operations of any single informant. However, a description of some of the State's major timber using companies is obviously desirable; therefore, the Forestry Commission has supplied the details given below:

#### *Paper, Hardboard and Particle Board*

*Associated Pulp and Paper Mills Ltd* and subsidiaries manufacture paper at Burnie and particle board and paper at Wesley Vale. Their hardboard mill closed at the end of the 1977-78 financial year after 27 years production, largely due to a significant decrease in demand by the export market and the highly competitive nature of the reconstituted wood panelling industry in Australia. The Company owns 128 000 hectares of forested land and holds cutting rights over Crown land for 24 kilometres on each side of the Emu Bay railway line from the north coast to the Pieman River.

In 1970 the Company completed the first stage of its pulp and paper mill at Wesley Vale at a cost of \$25 million. The first paper machine installed has an annual capacity of 41 000 tonnes of magazine paper and provision has been made for the installation of three additional machines. However, expansion at Wesley Vale has been deferred due to economic conditions and the difficulty of financing the very high capital cost of the project at the present. An alternative expansion project at the Burnie mill costing \$25 million to produce bleached, softwood pulp from Company and Forestry Commission softwood plantations has been completed.

#### *Newsprint*

*Australian Newsprint Mills Ltd* situated at Boyer on the Derwent River is one of two mills producing newsprint in Australia. Its timber concession follows the general line of the Derwent as far north as Lake King William.

The *Florentine Valley Paper Act* 1966 increased ANM's concession area from 110 479 hectares to 150 948 hectares to provide the basis for an expansion program. The Company is required by the Act to supply 30 100 cubic metres of logs to other timber-using industries each year. Newsprint production over 1982-83 was 222 000 tonnes which is marginally above the previous record of 221 000 tonnes in 1979-80. Machinery was installed in 1978 to manufacture a special type of thermo-mechanical pulp from *Pinus radiata* which will partly replace imported Kraft chemical pulp. The *Pinus radiata* pulpwood for this project is being drawn from thinnings from the Forestry Commission *Pinus radiata* plantations near Scottsdale.

#### *Woodpulp*

*Australian Paper Manufacturers Ltd* which manufactured woodpulp at Port Huon for shipment to the company's paper mills in other States, closed in October 1982. The State Government suspended their licence and is currently evaluating proposals from several companies for the future utilisation of the resource. This concession and reserve area includes virtually the whole of the D'Entrecasteaux Channel coastline and the south coast as far west as Prion Bay; inland it extends west to the Mt Picton area. Also included in the reserve are Bruny Island and the Tasman Peninsula.

#### *Woodchips*

Woodchips manufactured from sawmill waste and other timber previously of limited commercial value, are primarily used for woodpulp production. Three Tasmanian companies, Forest Resources, Tasmanian Pulp and Forest Holdings Ltd and Associated Pulp and Paper Mills Ltd have woodchip export contracts with Japanese interests. Before granting woodchip export licences, the Federal Government stipulated that the companies, if they did not already have the capacity, should develop woodpulp manufacturing facilities within 15 years. The export of woodchips from Tasmania commenced in 1971. Articles on each of the three companies' woodchip operations were included in the 1975 edition of the *Year Book*.

The plant of Tasmanian Pulp and Forest Holdings (a subsidiary of APPM) at Spring Bay, near Triabunna on the east coast, has an annual capacity of more than 610 000 tonnes of woodchips. Timber for the project comes from pulpwood concession areas extending along the Eastern Tiers over some 220 kilometres from Murdunna in the south to Eddystone Point in the north. The Company has also been granted concessions over reserve areas covering much of central Tasmania. These areas will ultimately be used provided Tasmanian Pulp and Forest Holdings Ltd meets various stipulations contained in the *Pulpwood Products Industry (Eastern and Central Tasmania) Act* 1968. In addition, the Company is permitted to obtain pulpwood from areas in the reserve set aside by the Forestry Commission for silvicultural purposes or by utilising trees removed to open the forest for economic extraction of milling-quality timber.

The Company's first woodchips were exported from the Spring Bay complex in April 1971. Over the last five years the production rate has been maintained at around 700 000 tonnes per year.

Associated Pulp and Paper Mills Ltd and Forest Resources constructed their woodchip plants at Long Reach, near Bell Bay, on the Tamar River. Forest Resources has also installed portable and satellite chipping plants in the northern half of Tasmania. APPM Ltd draws its timber supplies from Crown forest concessions, private land and sawmill waste, while Forest Resources mainly relies on timber from private lands and sawmill waste. As well, Forest Resources currently removes pulpwood from areas of Crown forest in the north-west of the State. Annual capacity of the APPM Ltd plant is 914 500 tonnes of woodchips; Forest Resources 15-year export contract is for an annual 853 000 tonnes of woodchips.

Both companies commenced production of woodchips in 1972; APPM at its Long Reach plant in May 1972 and Forest Resources from its portable and satellite chipping plants in mid-1972. First exports by the two companies were made in late 1972. In February 1973 the first log trains commenced using the rail extension to Long Reach giving the two companies economic access to more distant timber supplies.

In September 1979, Associated Pulp and Paper Mills Ltd were successful in a take-over bid for Tasmanian Pulp and Forest Holdings Ltd. Tasmanian Pulp and Forest Holdings Ltd continued to trade as a separate company to Associated Pulp and Paper Mills Ltd's export operations in the north of the State.

### The State Forestry Commission

The principal officers of the State Forestry Commission are the Chief Commissioner and three Commissioners. At 30 June 1983 the Commission employed a work force of 708 including administrative staff.

The Forestry Commission is primarily concerned with the conservation of Tasmania's State forests; this requires that it exercise control over the rate at which logs and pulpwood are taken, and also that it introduce effective measures to ensure regeneration. Other important functions include: (i) road construction, providing access to State forests; (ii) maintaining an annual program of softwood planting; (iii) protection of the forest estate from damage by fire, insects and disease; (iv) research, which aims to improve forest health and growth while developing more effective techniques of forest regeneration and fire protection; and (v) the management of State forests for recreation and wildlife conservation.

#### *Private Forestry*

The Forestry Commission's responsibility for State forests was widened by the *Forestry Act* 1977, which empowered the Commission to promote the development and proper management of private forests. The Act provided for a Private Forestry Council to advise the Forestry Commission on private forestry and a Private Forestry Division to provide advice and assistance to forest owners. Both these organisations were officially established in September 1978.

The activities of the Private Forestry Division have many facets, extending well beyond the administration of financial assistance schemes. It has to consider and recommend on the wide use of the private forest resource, which is of major importance to Tasmania's on-going industrial potential. An inventory review of the private forest resource and a survey of the loss of forest to agriculture are underway. Together, these will determine an acceptable rate of private forest cutting and the need for assistance in reafforestation.

Six assistance schemes have been established: The Pine Plantation Development Loan; the Nursery Stock Grant; the Native Forest Restoration Grant; the Eucalypt Plantation Grant; the Special Species Grant; and the Individual Research Grant. An amenity forestry assistance scheme was introduced in 1982 called Treescape. This scheme provides financial assistance for tree planting projects other than for commercial timber production on rural land.

The Division has an expanding role in educating and advising landowners on the management, protection and sale of timber from existing forests. A wide range of informational material has been produced. The response from landowners is such that the Private Forestry Division will be fully committed in implementing the provisions of the Act.

Activities of the Forestry Commission, Tasmania: Summary  
(Source: Forestry Commission)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Area prepared for regeneration						
burning .....ha	5 484	5 011	7 105	7 287	6 590	7 696
Seedlings produced ..... '000	2 810	3 385	3 336	4 356	3 818	3 811
Plantations—						
Established during year ...ha	1 966	1 920	1 527	1 596	1 626	1 557
Pruned .....ha	813	159	417	534	485	290
Thinned .....ha	360	399	497	688	482	1 100
Firebreaks—						
Constructed .....km	62	82	110	63	51	50
Roads—						
Constructed .....km	137	128	130	118	80	72
Improved .....km	34	9	80	32	28	47

The Commission has a responsibility for controlling forest fires on or near State forests; losses through bush fires fought by the Commission in recent years are reported in the following table:

Bush Fires Fought by the Forestry Commission, Tasmania  
(Source: Forestry Commission)

Year	Fires reported	Area burnt				Cost of sup- pression
		State forest	Other Crown land	Private property (a)	Total (a)	
	no.	hectares	hectares	hectares	hectares	\$
1977-78 ..	199	17 580	6 369	16 125	40 074	209 553
1978-79 ..	90	2 602	1 333	419	4 354	63 608
1979-80 ..	183	21 100	3 403	12 302	36 805	414 163
1980-81 ..	141	5 597	15 694	1 588	22 879	580 118
1981-82 ..	163	17 956	58 337	28 827	105 120	605 531
1982-83 ..	255	34 979	15 326	12 080	62 385	1 243 645

(a) Includes only those fires on private property fought to protect adjoining State forest or timbered Crown land.

Total expenditure by the Commission during 1982-83 was \$31.5m (21.3m in 1981-82). This expenditure was funded from Loan Funds, Consolidated Revenue, funds provided under the *Softwoods Forestry Agreement Act 1976* and monies made available for unemployment relief. Money collected each year (mainly from timber royalties) is paid into Consolidated Revenue and, by law, becomes a grant to the Commission the following year.

The main revenue of the Forestry Commission is derived from royalties, i.e. charges paid by those taking timber from Crown lands. By law, such revenue is specifically reserved for expenditure on forestry. The next table has been compiled to show the revenue and expenditure of the Commission for the last five years; expenditure exceeds revenue since money from State loan funds devoted to forestry purposes is included in expenditure.

Forestry Commission Revenue, Tasmania  
(\$'000)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Revenue</i>					
Royalties .....	5 083	8 063	9 771	9 910	9 353
Road charges .....	695	908	1 072	1 973	1 602
Other .....	269	289	321	349	546
Total .....	6 047	9 260	11 164	12 232	11 501

The Commission is currently installing a new accounting system, and expenditure for 1982-83 is detailed in the following table:

Forestry Commission Expenditure, Tasmania, 1982-83

Particulars	Amount (\$)
Native Forest Estate .....	3 491 721
Hardwood Plantations Developing Account .....	1 487 281
Softwood Plantations Developing Account .....	6 762 403
Native Forest Operating Account .....	16 361 483
Softwood Plantation Operating Account .....	3 257 192
Repayment of State Loan .....	5 956
Repayment of Commonwealth Loan .....	86 105
Total .....	31 452 141

#### *Federal Government-State Agreement*

The Federal *Softwoods Forestry Agreement Act 1967* was passed with the specific intention of increasing the rate of softwood-plantings in Australia by providing Federal financial assistance to the States. Under the Act each State was allocated: (i) a *base year* area of softwood plantings which was financed by the State; and (ii) a *scheduled* area in excess of the base year figure, the excess financed by special Federal Government loans. The base year area was constant for each year of the five-year program which commenced in 1966-67.

In late 1972 Federal legislation was passed which extended the Federal Government-State softwood forestry agreement for a further five years. The legislation was made retrospective from July 1971. Financial terms were similar to those set out in the 1967 agreement. The *Softwood Forestry Agreement Act 1976* extended the agreement, but with reduced planting rates, for an additional year from 1 July 1977. In 1978, the financial agreement was renewed for five years from 1 July 1977. The Commonwealth was to contribute to the tending of those plantations which had been established under the agreement during the 11-year period from 1966-67 to 1976-77.



### Sawmilling

The next table shows the number of sawmills and their geographical distribution in the State. There has been an overall reduction in recent years.

**Distribution of Operative Sawmill and Plywood Mill Locations  
by Statistical Divisions and Sub-divisions**

<i>Statistical divisions and sub-divisions</i>	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Hobart .....	12	12	11	11	10	9
Southern .....	43	48	43	50	49	41
Northern—						
Tamar .....	48	43	39	38	39	39
North Eastern .....	21	19	19	19	15	15
Total .....	69	62	58	57	54	54
Mersey-Lyell—						
North Western .....	30	36	34	41	37	38
Western .....	7	8	7	7	5	5
Total .....	37	44	41	48	42	43
Tasmania .....	161	166	153	166	155	147

### Average Size of Mills

In the year 1963-64 no Tasmanian sawmill exceeded an annual log input of 25 000 cubic metres. A size distribution of mills, classified by volume of log inputs, for recent years is given in the next table:

**Number of Operative Sawmills (Including Plywood Mills)  
by Volume of Annual Log Input, Tasmania**

<i>Size classification (cubic metres)</i>	<i>Number of sawmills and plywood mills (a)</i>					
	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Up to 500 .....	4	2	1	1	—	1
501- 1 000 .....	3	3	1	—	—	2
1 001- 1 500 .....	8	3	2	2	4	3
1 501- 3 000 .....	23	13	15	12	14	16
3 001- 5 000 .....	19	19	22	17	19	15
5 001-10 000 .....	38	22	18	21	23	21
10 001-15 000 .....	7	8	8	6	4	7
15 001-30 000 .....	9	11	13	11	9	8
30 001-45 000 .....	4	2	2	2	5	4
45 001-60 000 .....	1	2	—	2	1	1
Over 60 000 .....	1	—	1	2	3	2
Total .....	117	85	83	76	82	80

(a) Includes only mills employing four persons or more; data has been extracted from manufacturing census results.

### Mill Production of Timber

As shown previously, logs treated in sawmills and plywood mills during 1982-83 for the production of sawn, peeled, and sliced timber totalled 647 000 m<sup>3</sup> while the resulting timber produced totalled only 236 000 m<sup>3</sup>. The difference between the volume of logs treated and of timber produced is not all waste from the millers' point of view. Admittedly, there is very limited use for sawdust but most offcuts are sold as input to the woodchip and woodpulp industries or docked and sold as firewood.





Thicket of blackwood (*Acacia melanoxylon*) saplings in North-West Tasmania [Copyright Edward Gall]





*Huon pine (Lagarostrobos franklinii) forest at Lake Vera, Wild Rivers National Park*

[Copyright Edward Gall]



### Chipping, Grinding and Flaking of Wood

Chipping, grinding and flaking of wood is the first process in the production of wood pulp, paper, etc. Up to 1969-70 all chipped, ground and flaked wood was used in local plants making wood pulp, paper, hardboard and particle board. However, from 1970-71 production of woodchips for overseas exports has also been undertaken.

The importance of woodchipping for export is indicated by the following table:

Chipping, Grinding and Flaking of Wood, Tasmania						
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Producing locations at 30 June no.	31	32	32	30	32	31
Materials used—						
Logs (a) ..... '000 m <sup>3</sup>	2 751	2 941	3 594	3 370	3 071	3 182
Sawmill offcuts ..... '000 m <sup>3</sup>	261	264	292	309	246	212
Total ..... '000 m <sup>3</sup>	3 012	3 204	3 885	3 679	3 317	3 394
Chipped, ground and flaked wood produced (green weight)—						
For local processing ..... '000 t	797	781	871	1 074	938	875
For export ..... '000 t	2 041	2 197	2 802	2 354	2 181	2 293
Total ..... '000 t	2 838	2 978	3 672	3 428	3 119	3 168

(a) Includes log equivalent of limbwood and billets.

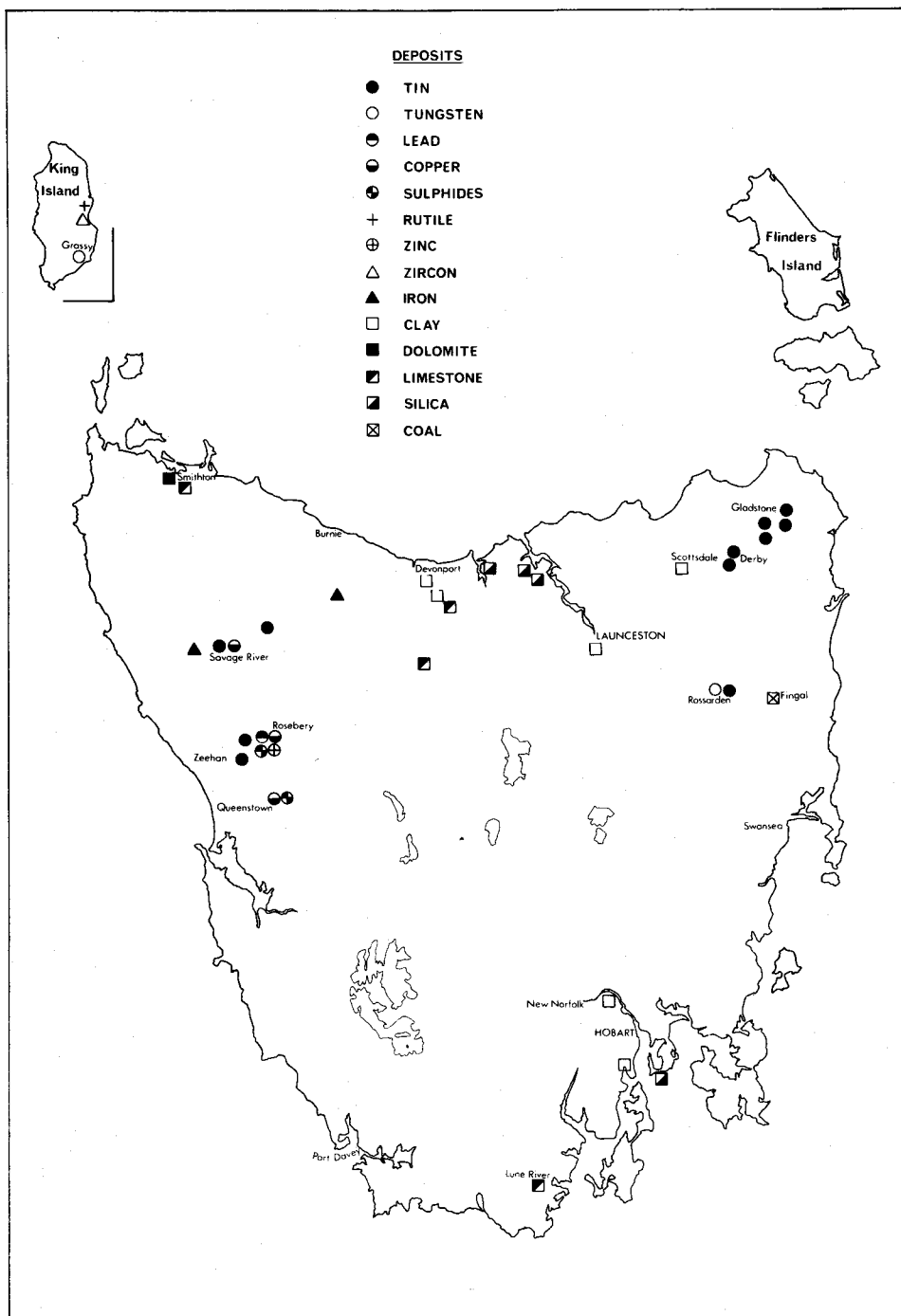
## MINING

### Introduction

For statistical purposes, mining is taken to cover the operations normally thought of as mining and quarrying (i.e. the removal from underground or surface workings of ores, etc.), the recovery of minerals from ore dumps, tailings, etc. and ore dressing (i.e. concentration and other elementary treatment). It does not include the smelting and/or refining of metallic minerals or the processing of non-metallic minerals (e.g. limestone into cement); these operations are classified as manufacturing.

In the present Tasmanian economy, two important metals will serve to illustrate the distinction between mining and manufacturing: aluminium, produced at Bell Bay on the Tamar; and zinc produced at Risdon near Hobart. In terms of the previous definition, the two metals are considered to be the output of manufacturing and only a small part of their total value is attributable to the mining industry in Tasmania. In the case of aluminium, no Tasmanian ores or concentrates are used and no value accrues to the Tasmanian mining industry. A substantial part of the value of the aluminium is, in fact, accounted for by imported materials. Zinc is produced from both imported and locally-produced concentrates, but only the value of the local concentrates produced at Rosebery is included as contributing to the total value of the Tasmanian mining industry. Prior to the 1977-78 Census of Mining Establishments, the 1969 preliminary edition of ASIC was used to provide a definition of the mining industry. As from 1977-78, the definition of the mining industry has been changed to that specified in the 1978 edition of the ASIC (Cat. No. 1201.0) which treats iron ore pelletising as part of the mining industry and not as part of manufacturing industry.

**Location of Principal Mineral Deposits, Tasmania**  
**Metallic, Non-Metallic and Fuel Minerals**



### Historical

Tasmania's first mine opened at Port Arthur in 1834. In that year, it produced 61 tonnes of coal but closed just 10 years later due to the poor quality of the coal and other discoveries elsewhere. Major mineral discoveries were not made until later in the nineteenth century—tin oxide was first discovered near Mt Bischoff in 1871, silver-lead ore was discovered in the Zeehan-Dundas area in 1882 and the 'Iron Blow' copper ore outcrop near Mt Lyell was discovered in 1883. These and later discoveries led to the establishment of mining operations which have had a significant impact on Tasmania's growth. A more detailed historical background to the development of mining in the State is included in the 1976 and earlier editions of the *Year Book* and a 'West Coast Mining Chronology' is included in the 1968 edition.

### Importance of Mining to the State

Mining activity in Tasmania has been subject to frequent and severe fluctuations, mainly as a result of changes in supply and demand. Nevertheless, mining forms an important sector of the Tasmanian economy. The next table lists the major mineral products produced in Tasmania, the locations of the main mines, the assayed content of ores mined during 1981-82 and the assayed content of Tasmanian ores mined as a percentage of total Australian production.

Major Mineral Products: Tasmania-Australia Comparison, 1981-82

Mineral product	Location of main mine(s)	Unit	Assayed content of ores mined		Per cent (a)
			Tasmania	Australia	
Coal (black) .....	Fingal Valley	tonnes	(b) 263 397	(b) 99 433 000	0.3
Copper .....	Mt Lyell	tonnes	23 033	259 633	8.9
Gold .....	Mt Lyell, Rosebery	kg	2 000	22 328	9.0
Iron .....	Savage River	tonnes	1 387 310	54 886 000	2.5
Lead .....	Rosebery, Williamsford	tonnes	30 820	454 776	6.8
Silver .....	Rosebery, Williamsford	kg	89 821	887 569	10.1
Sulphur .....	Mt Lyell, Rosebery	tonnes	61 597	414 551	14.9
Tin .....	Renison Bell	tonnes	7 197	12 750	56.4
Tungstic oxide ...	Grassy (King Island)	tonnes	2 463	3 843	64.1
Zinc (c) .....	Rosebery	tonnes	84 214	623 904	13.5

(a) Tasmanian production as a proportion of Australian production. (At 30 June 1982, Tasmania's population was 2.8 per cent of the total population of Australia.)

(b) Actual production.

(c) Tasmania accounted for approximately 64 per cent of Australia's total refined zinc production in 1981-82. Both local and interstate concentrates are refined in the State.

### Major Mining Companies

Normally, the Bureau does not publish information relating to any single enterprise or establishment but only publishes statistical aggregates where these do not directly or indirectly reveal the operations of any single informant. However, inclusion of some description of some of the major mining companies operating in Tasmania is most desirable; therefore, the State Department of Mines has prepared the following brief summaries and accepts responsibility for the information given. (The operations of The Electrolytic Zinc Company of A/asia Ltd (Risdon and Rosebery) and Comalco Aluminium (Bell Bay) Ltd, together with other major Tasmanian manufacturing companies, are summarised in the section 'Industrial Development' which appears in Chapter 14.)

**King Island Scheelite (King Island):** A member of the Peko-Wallsend Limited group of companies, this Company mines and processes scheelite ore to the concentrate stage from its two underground mines, Bold Head and Dolphin. A leaching plant also produces artificial scheelite and molybdenum concentrates. The 1980 *Year Book* includes an article on this Company (pp. 217-223).

*Renison Goldfields Consolidated Limited—Mt Lyell (Queenstown):* This Company, which commenced operations in 1897, is producing copper in the form of concentrates at the rate of 18 000 tonnes of contained copper per year from 1 600 000 tonnes of ore. The ore is largely mined underground and hauled to the surface by a major diesel trucking operation via a decline. Recent developments include a major pumping program. (The 1978 *Year Book* includes a special article titled 'Problems for the Mt Lyell Mining and Railway Co. Ltd', pp. 247-249.)

*Renison Goldfields Consolidated Limited—Renison (Rosebery):* The present mining and concentrating plant was commissioned in December 1966. It has grown out of early mining operations to become the largest tin mine in Australia. It has the further distinction of being the world's largest producer of tin metal in concentrates from a hard rock underground mining operation. A concentrate leach plant was completed in August 1977. This plant treats both high grade gravity and low grade flotation concentrates by sulphuric acid leach to produce a single product containing about 50 per cent tin. Smelting trials were conducted in Japan in 1977 with a view to establishing an electric tin smelter in Tasmania to treat tin concentrates from the leach plant. Current production rates are of the order of 11 000 tonnes of tin concentrate, containing 5 500 tonnes of tin, from 600 000 tonnes of ore. A two stage development program has increased capacity for ore treatment to 850 000 tonnes per annum. (The 1979 *Year Book* includes a special article on the Company, pp. 216-223.)

*Savage River Mines (Pickands Mather and Co. International Managing Agent) (Savage River):* Established at a cost of \$80m, the Port Latta iron ore pelletising plant commenced operations in 1968. Annual production was increased during 1971 to more than 2.5m tonnes of high-grade iron ore pellets. The entire production is sold to Japanese steel mills. The life of the operation has been extended by development of the northern deposit.

### Statistics of Mineral Production

#### *Source of Data*

Statistics relating to quantities of minerals produced (including assayed metallic content) are, in the main, obtained from the State Department of Mines and are supplemented, where necessary, with data obtained from the annual census of mines and quarries conducted by the Australian Bureau of Statistics, and from the Federal Bureau of Mineral Resources.

Other details of the mining industry such as employment, value of output, and costs of production, etc. are obtained from the annual census of mines and quarries, conducted by the Bureau. This census was first conducted in 1952 and the information obtained from each census was basically the same until 1968. As from 1968-69 the mining sector census was standardised in accordance with the concepts employed in the integrated economic censuses (see 'Integrated Economic Censuses' in Chapter 19 for a comparison between mining and other industries included in the integrated censuses).

Tasmania's larger mining operations, in particular metal mining, are located in the west of the State and are concentrated in an area from Queenstown to Savage River. A number of tin mines operate in the north-east of Tasmania but their combined output no longer compares with either former activity in that area or current operations in the west.

#### *Metallic Minerals*

The table that follows shows the quantity of metallic minerals produced in Tasmania for a six-year period:

## Metallic Minerals: Production, Tasmania

<i>Mineral</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Tonnes</i>						
Chromite concentrate .....	—	301	1 285	1 862	977	—
Copper concentrate .....	70 237	70 668	77 039	64 791	80 802	68 686
Copper-tin concentrate .....	2 610	1 806	1 980	2 239	1 916	3 189
Iron—Concentrate .....	2 315 196	1 869 607	2 271 990	2 191 979	2 175 383	2 020 551
Oxide .....	14 700	13 793	15 525	15 946	20 600	25 490
Lead concentrate .....	13 785	17 710	18 226	18 629	12 900	28 217
Lead-copper concentrate .....	25 709	27 760	24 719	24 185	22 328	31 999
Molybdenum concentrate .....	—	—	—	66	54	45
Pyrite concentrate .....	227 242	252 469	110 942	15 720	—	—
Rutile concentrate .....	3 886	—	—	—	—	—
Tin concentrate .....	15 035	14 677	14 127	13 552	14 498	14 936
Tungsten concentrates—						
Scheelite concentrate .....	3 180	3 391	3 123	3 629	3 536	3 239
Wolfram concentrate .....	215	174	193	177	267	149
Zinc concentrate .....	126 271	142 568	131 096	131 645	94 636	146 943
Zircon concentrate .....	3 722	—	—	—	—	—
<i>Kilograms</i>						
Gold (not in concentrates) .....	1	1	1	1	r —	—

*Assayed Content:* In the following table, the various concentrates have been grouped to show their content in terms of individual metals. The contents stated are as determined by assay and include all pay metals and metals which are a refiner's prize; totals compiled on this basis contain no allowances for losses in smelting and refining and therefore, in general, exceed the quantities actually recoverable. The table refers exclusively to minerals mined in Tasmania.

## Assayed Contents of Metallic Minerals Produced, Tasmania

<i>Mineral</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Cadium (Tonnes)</i>					
Zinc concentrate .....	200	177	173	126	206
<i>Chromic Oxide (Tonnes)</i>					
Chromite concentrate .....	168	603	1 040	567	—
<i>Copper (Tonnes)</i>					
Copper concentrate .....	18 548	20 174	16 948	21 147	17 860
Copper-tin concentrate .....	390	457	480	401	681
Lead concentrate .....	89	90	61	49	131
Lead-copper concentrate .....	3 599	3 343	3 077	2 645	3 901
Zinc concentrate .....	398	407	394	290	460
Total .....	23 024	24 471	20 960	24 532	23 033
<i>Gold (Kilograms)</i>					
Copper concentrate .....	400	460	400	467	419
Lead concentrate .....	39	61	47	37	69
Lead-copper concentrate .....	1 327	1 038	1 049	809	1 305
Zinc concentrate .....	167	204	169	132	206
Other sources .....	1	1	1	—	—
Total .....	1 934	1 763	1 666	1 445	2 000

*continued next page*



Assayed Contents of Metallic Minerals Produced, Tasmania—*continued*

<i>Mineral</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Iron (Tonnes)</i>					
Iron concentrate .....	1 291 899	1 569 946	1 514 656	1 503 189	1 387 310
<i>Lead (Tonnes)</i>					
Lead concentrate .....	11 942	11 726	11 763	7 734	17 124
Lead-copper concentrate .....	6 882	5 155	5 562	6 020	8 288
Zinc concentrate .....	4 763	4 291	3 887	3 021	5 408
Total .....	23 587	21 172	21 212	16 775	30 820
<i>Manganese (Tonnes)</i>					
Zinc concentrate .....	613	261	266	193	282
<i>Molybdenum (Kilograms)</i>					
Molybdenum concentrate .....	—	—	25 209	19 863	16 873
<i>Silver (Kilograms)</i>					
Copper concentrate .....	2 636	2 887	2 863	3 875	2 748
Lead concentrate .....	15 401	15 903	13 579	8 992	18 575
Lead-copper concentrate .....	56 430	49 995	43 765	37 468	56 095
Zinc concentrate .....	12 929	12 133	10 439	8 002	12 403
Total .....	87 397	80 917	70 645	58 337	89 821
<i>Sulphur (Tonnes)</i>					
Lead concentrate .....	3 153	3 437	3 511	2 540	5 413
Lead-copper concentrate .....	8 172	7 558	7 193	6 357	8 955
Pyrite concentrate .....	114 690	52 986	7 637	—	—
Zinc concentrate .....	45 505	42 830	43 362	31 593	47 229
Total .....	171 520	106 811	61 703	40 490	61 597
<i>Tin (Tonnes)</i>					
Copper-tin concentrate .....	45	47	45	29	(a) 40
Tin concentrate .....	6 947	6 913	6 755	7 030	7 157
Total .....	6 992	6 960	6 800	7 059	7 197
<i>Tungstic Oxide (Tonnes)</i>					
Scheelite concentrate .....	2 465	2 280	2 716	2 771	2 355
Wolfram concentrate .....	124	139	127	189	108
Total .....	2 589	2 419	2 843	2 960	2 463
<i>Zinc (Tonnes)</i>					
Lead concentrate .....	1 885	2 099	2 498	1 893	3 691
Lead-copper concentrate .....	2 865	2 546	2 984	2 763	3 835
Zinc concentrate .....	75 185	68 429	67 765	48 844	76 688
Total .....	79 935	73 074	73 247	53 500	84 214

(a) Estimated.

*Fuel Minerals (Coal)*

The only fuel mineral mined in Tasmania is coal. There are known deposits of coal throughout much of Tasmania but the most important are those located in the Fingal Valley in the north-east. The Fingal Valley deposits were discovered in 1866.

In 1890 Tasmania produced 55 000 tonnes of coal and production continued to rise until a peak of over 300 000 tonnes was reached in 1959-60. Since then there has been

a marked decline due to competition from fuel oil, particularly in manufacturing industries. Recently the downward trend in production has been reversed with major Tasmanian manufacturers switching back to coal from oil as their fuel for operations. Production details for recent years (in tonnes) are as follows: 1976-77, 193 927; 1977-78, 195 291; 1978-79, 252 800; 1979-80, 279 197; 1980-81, 304 727; and 1981-82, 395 347

#### *Non-Metallic (Excluding Fuel) Minerals*

The quarrying of limestone is the earliest recorded activity in the field of non-metallic mineral mining in the State, burnt lime being sought as a base for building mortar. Production of this non-metallic mineral has gradually increased to meet a rising demand in various industrial processes. Large exports of limestone were made in the period 1918-1947, when the BHP Co. Ltd operated quarries at Melrose on the North-West Coast.

The next table shows the Tasmanian production of non-metallic minerals for a six-year period:

**Non-Metallic (Excluding Fuel) Minerals Production, Tasmania  
(Tonnes)**

<i>Mineral</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Clays and shales—						
Brick .....	153 306	137 593	136 947	143 784	162 830	151 020
Other .....	49 704	41 684	54 406	55 475	50 970	73 599
Dolomite .....	7 734	11 232	15 018	17 464	9 872	13 632
Limestone (a) .....	667 090	713 589	757 976	722 131	744 077	840 806
Peat moss .....	330	372	345	880	702	565
Pebbles .....	1 189	1 566	1 418	1 044	1 029	1 220
Silica (b) .....	47 418	56 640	59 420	93 831	37 329	45 020

(a) Excludes quantities used directly as building or road construction material.

(b) For glass, chemical, etc. manufacturing.

#### *Construction Materials*

In addition to the types of mining and quarrying previously described there is the quarrying of construction materials (for buildings, roads, etc.) such as crushed and broken stone, gravel and sand. This type of activity also is taken into account when placing a value on the output from mines and quarries, measuring their level of employment, etc.

### **Census of Mining Establishments**

#### *Mining Establishments—Summary of Operations*

The tables that follow give results for the mining censuses from 1976-77 to 1981-82:

**Census of Mining Establishments  
Summary of Operations by Industry Sub-division, Tasmania**

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78 (a)</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Metallic Minerals</i>						
Establishments (b) .....	19	16	18	23	30	25
Persons employed (c)—						
Males .....	3 596	3 679	3 735	3 883	4 035	3 689
Females .....	184	177	183	186	202	195
Total .....	3 780	3 856	3 918	4 069	4 237	3 884
Wages and salaries .....	\$'000 48 309	\$'000 52 759	\$'000 58 712	\$'000 70 178	\$'000 78 574	\$'000 84 601
Turnover .....	\$'000 174 523	\$'000 233 950	\$'000 277 224	\$'000 340 872	\$'000 336 544	\$'000 321 866
Stocks—						
Opening .....	\$'000 22 760	\$'000 23 881	\$'000 24 485	\$'000 26 496	\$'000 40 183	\$'000 40 245
Closing .....	\$'000 19 416	\$'000 24 404	\$'000 26 271	\$'000 40 101	\$'000 39 932	\$'000 42 040

*continued next page*

**Census of Mining Establishments**  
**Summary of Operations by Industry Sub-division, Tasmania—continued**

Particulars	1976-77	1977-78 (a)	1978-79	1979-80	1980-81	1981-82
<i>Metallic Minerals</i>						
Purchases, etc. (d) .....\$'000	61 341	83 442	106 647	123 234	158 780	171 407
Value added .....\$'000	109 838	151 031	172 363	231 243	177 513	152 254
Rent, leasing expenses .....\$'000	1 071	1 330	1 464	2 199	2 113	2 672
Fixed capital expenditure (e) .....\$'000	12 100	16 163	18 687	28 927	35 487	24 416
<i>Coal</i>						
Establishments (f) .....no.	1	1	1	1	1	1
<i>Construction Materials</i>						
Establishments .....no.	28	33	32	34	29	27
Persons employed (c)—						
Males .....no.	180	191	160	221	187	143
Females .....no.	5	6	14	20	20	6
Total .....no.	185	197	174	241	207	149
Wages and salaries .....\$'000	1 607	2 150	1 834	3 099	2 850	1 941
Turnover .....\$'000	7 813	10 173	10 522	10 522	14 912	14 409
Stocks—						
Opening .....\$'000	610	609	525	1 472	1 955	1 503
Closing .....\$'000	524	745	1 174	1 996	1 608	1 307
Purchases, etc. (d) .....\$'000	3 175	3 849	5 414	6 852	7 583	6 851
Value added .....\$'000	4 552	6 459	5 757	9 358	6 982	7 362
Rent, leasing expenses .....\$'000	218	227	171	207	225	884
Fixed capital expenditure (e) .....\$'000	793	3 896	2 308	1 042	626	641
<i>Other Non-Metallic Minerals</i>						
Establishments (f) .....no.	15	14	15	11	10	10
<i>Total Mining</i>						
Establishments (b) .....no.	63	64	66	69	70	63
Persons employed (c)—						
Males .....no.	3 939	4 056	4 114	4 312	4 439	4 055
Females .....no.	194	185	203	215	233	211
Total .....no.	4 133	4 241	4 317	4 527	4 672	4 266
Wages and salaries .....\$'000	51 538	57 136	63 122	75 878	84 699	90 963
Turnover .....\$'000	187 581	251 117	296 465	366 763	363 053	352 039
Stocks—						
Opening .....\$'000	23 483	24 671	25 459	28 529	42 818	42 868
Closing .....\$'000	20 086	25 397	28 091	42 785	42 640	44 335
Purchases, etc. (d) .....\$'000	65 565	89 338	115 135	133 624	170 172	183 819
Value added .....\$'000	118 619	162 505	183 963	247 396	192 703	169 688
Rent, leasing expenses .....\$'000	1 452	1 762	1 937	2 711	2 733	4 004
Fixed capital expenditure (e) .....\$'000	13 102	20 437	21 689	31 020	39 931	28 297

(a) Based on the 1978 edition of ASIC. Data for earlier years are based on the 1969 ASIC (preliminary). The main change from the 1969 to the 1978 ASIC was the transfer of iron-ore pelletising plants from the 'manufacturing' industry division to 'mining'.

(b) Excludes small tin producing establishments with a value of sales of less than \$20 000.

(c) At last pay-period in June; includes working proprietors.

(d) Purchases, transfers in and selected expenses.

(e) Outlay on fixed tangible assets less disposals.

(f) Other data not available for separate publication but included in 'Total Mining'.

### Mineral Exploration (Other than for Petroleum)

The statistics in the following tables relating to exploration for minerals other than petroleum are derived from the annual census of mineral exploration.

'Mineral exploration' consists of the search for mineral deposits, the appraisal of newly-found deposits, and the further appraisal of known deposits (including those being worked) by geological, geophysical, geochemical and other methods (including drilling). Exploration for water is excluded. The construction of shafts and adits primarily for exploration purposes is included.

The data obtained in the mineral exploration census are divided into the following categories:

*Exploration on Production Leases:* Relates to exploration carried out on a production lease currently producing, or under development for production of, minerals other than petroleum. Mines included in this section of the mineral exploration census correspond closely to those in the annual census of mining and quarrying with the exception of a limited number of itinerant prospectors and small mines excluded from the collection.

*Exploration on Other Areas:* Relates to: (i) exploration carried out on areas covered by exploration licences issued by the Department of Mines for minerals other than petroleum; and (ii) exploration by private enterprise for minerals which is not directly connected with areas under lease or licence, including general surveys, aerial surveys, report writing, map preparation and other off-site activities not directly attributable to particular lease or licence areas.

The following table shows expenditure details relating to mineral exploration (other than for petroleum) in Tasmania for recent years:

Mineral Exploration Other Than for Petroleum: Expenditure, Tasmania  
(\$'000)

Year	Wages and salaries paid	Stores, materials, fuels, etc. purchased	Payments to contractors (a)	Other current expenditure (b)	Net capital expenditure (c)	Total
<i>Private Exploration on Production Leases</i>						
1976-77 ..	338	131	712	274	22	1 477
1977-78 ..	303	187	965	218	57	1 730
1978-79 ..	435	168	1 499	198	30	2 330
1979-80 ..	397	126	1 463	256	53	2 294
1980-81 ..	974	398	2 960	305	179	4 816
1981-82 ..	1 257	414	3 015	177	22	4 885
<i>Other Private Exploration</i>						
1976-77 ..	811	325	1 024	598	79	2 838
1977-78 ..	1 345	566	2 387	1 073	311	5 681
1978-79 ..	1 610	559	2 936	1 732	145	6 983
1979-80 ..	2 250	937	4 882	2 138	199	10 405
1980-81 ..	3 296	1 227	5 541	4 208	644	14 916
1981-82 ..	4 480	1 704	6 857	4 431	478	17 949
<i>Total Private Exploration</i>						
1976-77 ..	1 149	456	1 736	872	102	4 315
1977-78 ..	1 648	753	3 352	1 291	367	7 411
1978-79 ..	2 045	727	4 436	1 929	175	9 313
1979-80 ..	2 647	1 063	6 345	2 394	252	12 699
1980-81 ..	4 270	1 625	8 501	4 513	823	19 732
1981-82 ..	5 737	2 118	9 872	4 608	500	22 834

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**Mineral Exploration Other Than for Petroleum: Expenditure, Tasmania**  
(S'000)—continued

Year	Wages and salaries paid	Stores, materials, fuels, etc. purchased	Payments to contractors (a)	Other current expenditure (b)	Net capital expenditure (c)	Total
<i>Total Government Exploration (d)</i>						
1976-77 ..	455	50	—	50	21	576
1977-78 ..	502	52	—	58	14	626
1978-79 ..	544	65	—	65	44	717
1979-80 ..	628	66	—	114	203	1 011
1980-81 ..	498	66	—	80	211	854
1981-82 ..	569	44	—	70	81	764
<i>Total Private and Government Exploration</i>						
1976-77 ..	1 604	506	1 736	922	123	4 891
1977-78 ..	2 150	805	3 352	1 349	381	8 037
1978-79 ..	2 589	792	4 436	1 994	219	10 030
1979-80 ..	3 274	1 129	6 345	2 508	455	13 710
1980-81 ..	4 768	1 691	8 501	4 593	1 034	20 586
1981-82 ..	6 306	2 162	9 872	4 678	581	23 599

(a) Amounts paid to contractors, geological consultants, etc., employed to carry out exploration activities.

(b) Other current exploration expenditure such as maintenance expenses, map preparation, aerial surveys, and rent and fees paid to governments for mineral tenements.

(c) Net capital expenditure is defined as expenditure on fixed tangible assets less disposals.

(d) Exploration by Tasmanian Department of Mines.

The next table shows the total drill hole depths drilled, sunk or driven in mineral exploration (other than for petroleum) in recent years:

**Mineral Exploration Other Than for Petroleum: Metres Drilled, Sunk or Driven, Tasmania**

Year	Drilling		
	Core (a)	Non-core (b)	Total
Private Exploration on Production Leases			
1976-77 .....	19 441	198	19 639
1977-78 .....	25 868	197	26 065
1978-79 .....	32 771	—	32 771
1979-80 .....	32 082	2 667	34 749
1980-81 .....	57 947	1 023	58 970
1981-82 .....	52 460	293	52 753
Other Private Exploration			
1976-77 .....	19 005	2 123	21 128
1977-78 .....	25 779	3 645	29 424
1978-79 .....	30 048	3 000	33 048
1979-80 .....	38 735	2 603	41 338
1980-81 .....	45 181	9 124	54 305
1981-82 .....	40 367	17 039	57 406
Total Private Explorations			
1976-77 .....	38 446	2 321	40 767
1977-78 .....	51 647	3 842	55 489
1978-79 .....	62 819	3 000	65 819
1979-80 .....	70 817	5 270	76 087
1980-81 .....	103 128	10 147	113 275
1981-82 .....	92 827	17 332	110 159

continued next page

**Mineral Exploration Other Than for Petroleum: Metres Drilled, Sunk or Driven, Tasmania—continued**

Year	Drilling		
	Core (a)	Non-core (b)	Total
<i>Total Government Exploration (c)</i>			
1976-77 .....	3 835	—	3 835
1977-78 .....	5 134	—	5 134
1978-79 .....	5 607	—	5 607
1979-80 .....	10 460	—	10 460
1980-81 .....	11 005	—	11 005
1981-82 .....	5 338	—	5 338
<i>Total Private and Government Exploration</i>			
1976-77 .....	42 281	2 321	44 602
1977-78 .....	56 781	3 842	60 623
1978-79 .....	68 426	3 000	71 426
1979-80 .....	81 277	5 270	86 547
1980-81 .....	114 133	10 147	124 280
1981-82 .....	98 165	17 332	115 497

(a) Diamond drilling, or any kind of drilling in which cores are taken.

(b) Alluvial, percussion and other drilling in which cores are not taken.

(c) Exploration by Tasmanian Department of Mines.

**FISHERIES****General**

The Tasmanian saltwater fishing industry involves an estimated 1 800 licensed fishermen and crew who operate 857 licensed fishing vessels from the State. The species which comprise the annual catch are not only scale fish but also include elasmobranchs (sharks), molluscs (scallops, oysters, abalone) and crustaceans (southern rock lobster).

In 1982-83 the catch of fish, molluscs, crustaceans and fresh water species totalled 18 739 tonnes which was an increase of 16 per cent on the 1981-82 figure of 16 187 tonnes. This record catch was mainly due to the dramatic increase in scallop production during the period.

The Fisheries Development Authority controls saltwater fisheries and the Inland Fisheries Commission controls freshwater fisheries. Most freshwater fish are caught for sport but (eels) have been caught for commercial purposes and the farming of trout is currently being undertaken.

Rainbow trout are raised commercially on trout farms at Bridport, Russell Falls and Howell. There are rainbow and brown trout in Tasmanian lakes and rivers (introduced as exotic species) but these may only be fished for by licensed sportsmen and may not be sold.

A commercial freshwater fishery for the short-finned eel was established in 1965. Production in 1982-83 was 24.7 tonnes which was 9 percent below the 27 tonnes recorded for 1981-82.

**Fish Varieties and Species**

The following table lists the main Tasmanian commercial fish varieties and species:

## Main Commercial Fish Varieties and Species, Tasmania

Variety	Species	Variety	Species
Eel .....	<i>Anguilla australis</i>	Tuna .....	<i>Thunnus</i>
Whitebait .....	<i>Lovettia sealii</i>		<i>maccoyii</i>
Rainbow trout .....	<i>Salmo gairdnerii</i>		<i>T. alalunga</i>
Flounder .....	<i>Fam. Pleuronectidae</i>		<i>Katsuwonus</i>
Cod .....	<i>Pseudophycis</i>		<i>pelamis</i>
	<i>barbatus</i>	Mackerel .....	<i>Auxis thazard</i>
		Snoek (barracouta) .....	<i>Thyrsites atun</i>
Mullet .....	<i>Mugil cephalus</i>	Garfish .....	<i>Hyporhamphus</i>
	<i>Aldrichetta</i>		<i>melanocheir</i>
	<i>forsteri</i>	Southern rock	
Trevalla, deep sea .....	<i>Hyperoglyphe</i>	lobster .....	<i>Jasus novaehollandiae</i>
	<i>antarctica</i>		<i>dasus</i>
Warehou .....	<i>Seriotelella brama</i>	Oyster .....	<i>Ostrea angasi</i>
Salmon .....	<i>Arripis trutta</i>		<i>Crassostrea gigas</i>
Morwong .....	<i>Nemadactylus</i>		
	<i>macropterus</i>	Scallop .....	<i>Pecten</i>
Trumpeter .....	<i>Latris lineatus</i>		<i>meridionalis</i>
	<i>Latridopsis</i>		<i>Equichlamys</i>
	<i>forsteri</i>		<i>bifrons</i>
			<i>Mimachlamys</i>
			<i>asperimus</i>
Flathead .....	<i>Platycephalus</i>	Abalone .....	<i>Notohalotis ruber</i>
	<i>richardsoni</i>		<i>Schismotis</i>
	<i>Platycephalus</i>		<i>laevigata</i>
	<i>speculator</i>		
	<i>Platycephalus</i>		
	<i>bassensis</i>		
	<i>Leviprora</i>		
	<i>laevigata</i>		
Shark .....	<i>Mustelus</i>		
	<i>antarcticus</i>		
	<i>Galeorhinus</i>		
	<i>australis</i>		

## Fisheries Statistics

## Source of Data and Method of Presentation

Statistics presented in this section have been supplied principally by the Tasmanian Fisheries Development Authority. They are derived from returns collected annually from fish buyers and processors. In the preparation of fisheries production statistics, the quantities are generally in terms of the form in which the catch is taken from the water. For example, the statistics of fish production are in terms of 'estimated live weight' which is calculated from landed weights by using conversion factors for the various species. These conversion factors allow for the fact that the quantities of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Crustaceans are reported on a 'whole weight' basis and molluscs (edible) on a 'gross (in-shell) weight' basis.

The actual edible yield varies depending on types of fish and methods of preparation. Barracouta yield about 51 per cent of live weight when filleted, and shark about 60 per cent when headed and gutted. The edible flesh in molluscs represents only a small portion of the in-shell weight. Approximately 1 kg of scallop flesh equals 4.5 kg in-shell weight and 1 kg of abalone flesh equals 2.25 kg in-shell weight.

The catch is generally defined as that landed in Tasmanian ports, regardless of whether it is caught in Tasmanian waters or not, or whether it is caught by Tasmanian fishermen or not. Shark, southern rock lobster and other fish taken by Victorian based fishermen in Tasmanian waters, but landed in Victoria, are included in the Victorian catch and excluded from Tasmanian figures on the basis that the catch influences the Victorian rather than the Tasmanian economy.

Details of production refer only to recorded commercial production. In view of the importance of amateur fishermen in certain types of fishing, details shown cannot be taken as representing the whole catch. In addition, it is likely that the figures shown understate, to some extent, the full commercial catch since no information is available on fish taken for sale by persons not licensed as professional fishermen.

### Production

**Fish Production by Type, Tasmania, Estimated Live Weight, (Tonnes) (a)**  
(Source: Tasmanian Fisheries Development Authority)

Type	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Australian salmon .....	611	451	283	200	417	211
Barracouta (snoek) .....	194	38	7	2	1	2
Cod .....	2	3	2	2	2	4
Flathead .....	112	186	62	129	149	58
Flounder .....	1	—	7	8	11	8
Garfish .....	20	21	39	49	36	20
Morwong .....	20	43	10	118	67	17
Mullet .....	6	3	4	5	3	2
Shark .....	1 710	1 490	1 210	1 288	1 086	793
Trevalla, deep-sea .....				220	202	263
Warehou .....	64	109	142	65	35	52
Trumpeter .....	3	4	4	8	13	12
Tuna .....	45	57	31	27	14	1
Other (b) .....	320	199	388	406	461	404
Total .....	3 105	2 605	2 188	2 527	2 498	1 847

(a) Estimated live weights are calculated from landed weights by conversion factors since quantities of fish are frequently reported in a gutted, headed and gutted, or otherwise reduced condition (e.g. barracouta and shark).

(b) Includes bait and freshwater species.

The fish types shown in the above table appear without any further description to identify the particular species but a specification of the more common species for each type is given earlier in this section. The figures, derived from fish buyers' transactions, do not reflect the actual production from Tasmanian waters due to: (i) landing at Tasmanian ports of fish caught in interstate waters; (ii) landing at interstate ports of fish caught in Tasmanian waters; and (iii) direct sales by fishermen.

### Crustaceans and Molluscs

In terms of value, the principal items in the Tasmanian catch are abalone and southern rock lobster (crayfish). The next table shows details of production of crustaceans and molluscs:

**Crustaceans and Molluscs: Production by Type, Tasmania**  
(Source: Tasmanian Fisheries Development Authority)

Type	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Crustaceans (Whole weight, tonnes)</i>						
Southern rock lobster .....	1 192	1 305	1 340	1 553	1 713	1 887
<i>Molluscs (In-shell weight, tonnes)</i>						
Abalone .....	2 525	3 100	3 214	3 743	4 194	2 968
Scallops .....	400	1 077	3 829	3 359	7 577	11 573
Oysters .....	138	116	105	190	353	569
Mussels .....	1	9	19	11	18	11
Squid .....	2	72	63	10	15	44
Octopus .....	2	5	3	2	—	13
Total .....	3 068	4 380	7 233	7 315	12 157	15 177



*Abalone:* Development of the Tasmanian abalone fishery dates from 1964 when divers commenced taking abalone for export. The catch increased from 33 tonnes in 1963-64 to 3 488 tonnes in 1970-71 but then fell away before recovering in the late 1970's. In 1981-82 a record catch of 4 194 tonnes was harvested, but then fell to 2 968 tonnes in 1982-83. However Tasmania still remains the leading producer of abalone in Australia.

*Rock Lobster:* Total production of rock lobster in Australia during 1981-82 was 15 685 tonnes of which Tasmania produced 11 per cent (1 713 tonnes). The main producing States were Western Australia with 10 509 tonnes (67 per cent) and South Australia with 2 720 tonnes (17 per cent).

*Scallops:* For many years Tasmania was the only State in Australia with a commercial scallop fishery; in 1955-56 Tasmania was joined by Queensland, but continued to retain its dominant position in the industry. However, in 1963 Tasmanian fishermen started a Victorian fishery in beds known to exist in Port Phillip Bay and the new site in its first year (1963-64) produced more than twice the quantity of the Tasmanian fishery. No scallops were dredged from Tasmanian waters in 1970-71, and only 52 tonnes in 1971-72. Following the discovery of new beds in Bass Strait the Tasmanian catch increased to 1 261 tonnes in 1974-75, but dropped away in the period from 1975-76 to 1977-78. The catch increased significantly in 1981-82 when the production more than doubled the previous year's figure. In 1982-83 the catch was 11 573 tonnes, 53 per cent above the 1981-82 figure.

#### Fish Landed at Fishing Ports

The table that follows shows the proportion of fish landed at Tasmanian fishing ports. The information relates to port of landing only, and not to the area in which the catch was made.

Proportion of Fish, Molluscs and Crustaceans, (Live Weight) Landed at Each Port, Tasmania (Per Cent)

Port	1980-81	1981-82	Port	1980-81	1981-82
<b>Derwent &amp; Channel—</b>			<b>Bass Strait &amp; Islands—</b>		
Dover .....	4.0	8.7	Bridport .....	2.7	3.5
Gordon .....	—	0.1	Currie .....	0.4	5.2
Hobart .....	9.3	7.5	Lady Barron .....	5.2	4.2
Kettering .....	4.4	2.2	Devonport (a) .....	17.6	6.0
Margate .....	4.3	7.3	Smithton .....	0.2	7.3
Southport .....	—	5.5	Stanley .....	20.8	3.4
			'Tamar' (b) .....	3.2	1.5
			Wynyard .....	3.3	0.4
Total .....	22.0	31.3	Total .....	53.4	31.5
<b>East Coast and Peninsula—</b>			<b>West Coast—</b>		
Bicheno .....	2.8	5.5	Strahan .....	6.6	8.1
Coles Bay .....	0.5	0.4			
St Helens .....	2.0	13.6			
Triabunna .....	6.5	4.1			
Dunalley .....	1.4	2.6			
Port Arthur .....	3.6	1.8			
Nubenna .....	1.2	1.1			
Swansea .....	—	—			
Total .....	18.0	29.1	Total Tasmania .....	100.0	100.0

(a) Includes Port Sorell.

(b) Launceston, Beauty Point and other Tamar ports.

The following table shows the proportion of fish landed in Tasmania in each month:

Proportion of Fish (Live Weight) Landed in Each Month, Tasmania  
(Per Cent)

Month	1980-81	1981-82	Month	1980-81	1981-82
July .....	4.9	7.8	January .....	11.2	11.5
August .....	8.8	5.1	February .....	8.5	8.5
September .....	1.9	4.8	March .....	7.4	9.5
October .....	8.3	5.4	April .....	8.4	7.0
November .....	11.1	14.1	May .....	14.1	7.2
December .....	8.9	9.1	June .....	6.8	10.0

### Value of Production—Fishing

The table that follows gives details of gross values of fishery products. (For definition of 'gross value' see later section 'Value of Production'.)

Fisheries: Gross Value of Production, Tasmania  
(\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Fish (a) .....	2 438	2 482	2 994	3 654	3 613	3 166
Crustaceans (b) .....	5 019	5 904	6 938	8 385	9 639	11 787
Molluscs .....	5 152	6 250	10 531	14 476	19 644	16 187
Total .....	12 609	14 636	20 463	26 514	32 896	31 140

(a) Includes value of seaweed harvested for production of alginate.

(b) Mainly southern rock lobster but includes crabs.

### Marketing

The majority of seafoods landed in Tasmania are sold in a processed form either on interstate or overseas markets and are dependent to some extent on changing world trade and marketing conditions for their future viability.

Factors in the international sphere which can affect Tasmanian fisheries include:

- (i) variations in exchange rates between Australia and our major overseas trading partners;
- (ii) general economic conditions in overseas countries including inflation factors, employment levels, consumer confidence and Government policies;
- (iii) international interest rates; and
- (iv) competition from other world seafood suppliers.

The abalone fishery, being the only purely export based fishery, particularly reflects current world trade and marketing conditions. During the 1982-83 period severe marketing difficulties afflicted the abalone fishery due to a combination of the following factors: buyer resistance to excessively high prices, reflecting the then current economic climate; record production and stock levels, and a general lessening of demand. This led to the industry implementing measures to reduce catches in an effort to reduce processed stocks and improve buyer confidence.

Marketing strategies in the rock lobster and scallop fisheries are also largely determined by the current situation in international markets which usually dictate the amounts of product available domestically as well as the domestic prices.

The major international markets for Tasmanian seafoods include Japan, Hong Kong, Singapore and the United States for abalone; France, New Zealand and Belgium for scallops; the United States for rock lobster tails; and Japan and Hong Kong for whole rock lobster.

Tasmania also imports significant quantities of seafoods, particularly those species which are in short supply or unavailable locally. These include prawns, some scale fish species in both fresh and frozen forms, most canned seafoods and some smoked varieties.

**Fishery Products: Value of Exports, Tasmania**  
(\$'000)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Fish (a)—Overseas .....	46	50	81	215	15	135
Interstate .....	583	607	587	441	529	188
Southern rock lobster—						
Overseas .....	373	676	774	1 548	r 1 439	2 409
Interstate .....	2 127	1 780	3 853	3 267	4 156	5 168
Molluscs—Overseas .....	2 640	4 385	7 496	13 733	r 18 789	21 879
Interstate .....	853	136	195	189	303	669
All types—Overseas .....	3 058	5 111	8 351	15 497	20 243	24 422
Interstate .....	3 563	2 523	4 635	3 897	4 988	6 026
Total .....	6 621	7 634	12 986	19 394	25 231	30 448

(a) Includes fresh and frozen fish and fish preserved in tins.

### Tasmanian Fisheries Development Authority

#### General

The Tasmanian Fisheries Development Authority was established on 1 December 1977 under the provisions of the *Fisheries Development Act 1977*. The Authority has the following objectives:

- (i) the promotion and development of the fishing industry that is carried on in or from Tasmania.
- (ii) the maintenance of proper standards with respect to fish and fish products intended for consumption in, or for export from, Tasmania both as to quality and as to the methods of handling, processing, storage, packing and transport.
- (iii) the undertaking of research, exploratory and experimental work related to the management of the living resources in the waters around Tasmania and to the fishing industry of Tasmania.

The management of the Tasmanian fisheries in tidal waters is the responsibility of the Minister for Primary Industry under the *Fisheries Act 1959*. Prior to December 1977 that Act was administered by the Fisheries Division of the Department of Agriculture. Administrative responsibility is now vested in the Tasmanian Fisheries Development Authority.

#### Fisheries Management

Staff of the Authority are responsible to the Minister for Fisheries for the implementation of the provisions of the *Fisheries Act* where it relates to tidal waters. These responsibilities principally relate to the monitoring and management of commercial and recreational fishing.

Fishermen are required to furnish monthly returns of their fishing activities which indicate catches, place of fishing and amount of time spent and equipment used. Fish processors provide monthly statistics on purchases and prices. This information, together with the measurement of samples of the catch, is used to monitor each fishery and, with the help of research developed mathematical models, predict the likely future state of the fishery and the effect if fishing effort changes. This monitoring provides information which together with economic data aids in determining what changes might be necessary to fisheries laws to protect, conserve and rationally utilise each fish resource.

Since 1965 Tasmania has closely managed its valuable fisheries such as rock lobster and abalone and required detailed licensing procedures and comprehensive controls on fishing methods. (Such measures were first introduced for the scallop fishery in the 1940s.) A licensing section and a field force of inspectors implement this system. Inspectors are decentralised at seven centres and equipped with modern fast and ocean-going patrol vessels. Fisheries inspectors also are the principal points of contact between the Authority and fishermen and provide the immediate source of information from Authority to industry and advise the Authority of matters concerning the industry.

### *Resource Development Research*

A major task of the Authority has been to assist diversification of the State's fishing industry and expand the utilisation of under-developed or partially developed marine resources. In the catching sector the principal methods used have been surveys and feasibility fishing and extension activities in fishing gear.

Feasibility fishing is a special form of exploratory fishing authorised by the Commonwealth and State Governments to accelerate an understanding of the undeveloped resources of the expanded Australian fishing zone. Foreign and/or joint foreign and Australian companies are authorised to use foreign vessels and crews under strictly controlled arrangements to evaluate resources under commercial or near commercial conditions. This opportunity to increase knowledge at little or no cost has been used to investigate the squid resource with Korean and Taiwanese jigging vessels.

Research activities are centred at the Authority's laboratory at Taroona and on the research vessel 'Challenger'. In addition specifically chartered vessels also collect information generally whilst engaged in surveys or special development projects.

Since the establishment of the Authority research has concentrated on developing aquaculture techniques and achieving a better understanding of demersal fish resources. Techniques in hatching and culturing of pacific and native oysters and commercial and queen scallops, have been investigated. Current research includes focusing on the potential for Atlantic salmon farming in Tasmania, as well as investigations into deep water trawl and orange roughy resources. The principal projects are supported by work in the field of marine chemistry, histology, data analysis and environmental monitoring.

### *Processing and Retailing Development*

A program of regular visits to processors and retailers ensures close contact with the industry. Developments in other countries are monitored and up to date advice is available on most topics. Assistance with the setting up of plants, vessels and shops has been provided and other activities include the investigation of products and processes. An increased effort to improve quality awareness throughout the industry is currently under way.

### *Promotions and Market Development*

The Authority continually undertakes an active promotional and market development program in conjunction with the industry, cooking demonstrations to school and community groups throughout the State, a recipe and poster service and exhibits at industry and trade fairs.

Market research and sampling is undertaken by the Authority and circulars are regularly produced to advise the industry of current overseas market conditions and new market opportunities.

#### *Publications*

The Authority's magazine *Fintas*, a quarterly publication, is the communication medium of the industry providing information on all Authority activities, market situations, regulations as well as articles of general interest.

*The Tasmanian Seafood Scene* also published quarterly, provides useful information to caterers, distributors and wholesalers regarding the use of various Tasmanian seafoods.

*The Tasmanian Seafood Cookbook*, is the first book prepared by the Authority to promote the general use of Tasmanian seafoods.

A recently completed publication by the Authority is the volume *Fishes of Tasmania*, the first comprehensive work on Tasmanian salt and freshwater fish, and is available in three formats.

Research officers also prepare a number of scientific papers based on their investigations which are published in various journals.

#### *Training*

The Authority's association with such bodies as the Australian Maritime College and the Tasmanian Fishing Industry Committee ensures that all training needs of the industry are met. Courses offered by the Authority include fish handling, quality control, fish filleting, scallop splitting, business management and gear development.

A further aspect of training provided by the Authority exists in the fish cooking demonstrations made available to schools throughout the State.

#### *Industry Assistance*

A Fisheries Finance Plan which was introduced in February 1978 operates in association with the Agricultural Bank of Tasmania (now Tasmanian Development Authority) and links developmental aspects of the *Fisheries Development Act 1977* with the *State Advances Act*.

The aim of the Plan is to provide a range of financial incentives through concessional interest rates and deferment of capital repayments to stimulate investment in the development of the fishing industry. Lending is conditional upon performance in the various developmental fisheries and to date the majority of assistance provided under the plan has been applied to the aquaculture industry.

The State Government has for many years provided capital funds for port facilities for fishermen such as jetties and slipways. The Authority supervises these facilities and acts with industry representatives and the Department of Main Roads in the provision, maintenance and operation of them.

#### **Further References**

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## Chapter 14

### MANUFACTURING

#### INDUSTRIAL DEVELOPMENT

##### Primary-Secondary Relativity

Prior to World War II, there were few large manufacturing establishments in Tasmania. The economy of the State was dominated by primary industries which, in 1938-39, accounted for 60 per cent of the net value of production of all recorded industries.

Post-war expansion of factory activity, particularly in the 1950s and 1960s, has made the State an important supplier of manufactured goods and processed materials. Major factories which have been established since World War II include producers of chemicals, woodpulp, textiles, processed foods, industrial equipment, refined aluminium, manganese alloys, iron ore pellets and woodchips. Steady, large-scale development of the State's hydro-electricity resources assisted such expansion.

Since the early 1950s, the manufacturing sector has been predominant in terms of its economic significance to the State and now has a value added more than double that of agriculture and mining combined. (See the section 'Integrated Economic Censuses' in Chapter 19 for an inter-sector comparison of various industry sectors.)

##### Tasmania as a Site for Industry

###### *Advantages*

Tasmania has certain advantages which have attracted new industrial enterprises. The principal factors are:

*Hydro-Electric Power:* The availability of competitively priced, bulk electricity for power intensive industries (e.g. metal smelting and refining, heavy chemicals, paper and paper-pulp making) has had a significant influence on Tasmania's industrial development in the past and is discussed in greater detail in the next chapter.

*Raw Materials:* Locally available raw materials provide the basis for many industries such as textiles, dairy foods and vegetable processing. Large timber reserves have led to the establishment of pulp and paper manufacturing, sawmilling and woodchipping.

*Stability of the Workforce:* Tasmania has established a record over many years for having fewer industrial disputes and, almost always, fewer days lost per employee each year due to strikes, than any other Australian State. The Tasmanian workforce also exhibits a more stable pattern in terms of duration of employment.

*Industrial Land, Harbours and Shipping:* The decentralised nature of the State and a policy of making provision for industry in each main region has enabled industrial land to be both readily available and cheap. Its proximity to deep-sea ports is another factor influencing the expansion of industry in and around the four main centres of population (Hobart, Launceston, Burnie and Devonport). The associated ports are fully equipped to handle unitised, containerised, roll-on/roll-off and orthodox cargoes, as well as cargo in bulk form. They are served by overseas and interstate ships using modern cargo handling techniques.

*Water Resources:* In some parts of the world, water resources are inadequate; shortage of water and the high cost of conservation, re-use and 'purification' have become

major problems in the expansion of industry. This is not the situation in Tasmania where water is abundant. The terrain favours the economical construction of high-level storages, while run-of-the-river pumping schemes are feasible at many sites.

### **Tasmanian Development Authority**

The Tasmanian Development Authority commenced operations on 1 March 1984. It represents a new concept of economic development for the State, and has been established on private enterprise lines.

The purpose of the Government in establishing the Authority was to revitalise and expand the Tasmanian economy and shift the past economic development emphasis from the purely industrial to a balance of all facets of the State's activities. As a result of this it aims to ensure the prosperity and welfare of the people of Tasmania. In more specific terms, the tasks of the Authority involve increasing employment and investment, arresting the decline of investment in the State, stopping the population and job drift to other States, and improving morale and increasing optimism in the private sector.

The affairs and activities of the Authority are conducted by a Board of Directors from the private sector. One of the directors is also the Managing Director of the Authority, and, as such, is the principal executive officer of the Authority. This blending of private sector expertise with a revitalised and dynamic public administration will give Tasmania a much needed new direction and image, and will ensure an efficient delivery of services.

The Directors of the first Board are:

Mr J. A. Rickard (Chairman)  
Sir Harold Cuthbertson  
Mr C. F. Clements  
Mr J. K. Edwards  
Mr P. J. Chandler (Managing Director)

Mr J. A. Rickard is Managing Director of MTM Limited, a board member of the Commonwealth Banking Corporation and of Advance Australia, Finance Chairman of the Tasmanian Bi-centennial Authority, and Director of a number of other Tasmanian companies. He is also a past member of the Commonwealth Technical and Further Education Council, the Economic Advisory Council and the Australian Manufacturing Council.

Sir Harold Cuthbertson is President of the Savings Bank of Tasmania, a board member and Managing Director of Blundstone Pty Ltd, a board member of Richardsons Meat Industries Ltd, Phoenix Prudential Australia Ltd, Cuthbertson Bros Pty Ltd, and H A Cuthbertson Holding Pty Ltd.

Mr J. K. Edwards is President of the Launceston Bank for Savings, an Associate Commissioner of the Hydro-Electric Commission, a Director of the Launceston Gas Company and of the Australian Crane Company, Deputy Chairman of the Australian Maritime College, and formerly General Manager and Chief Engineer of the Port of Launceston Authority. He is also a former Chairman of the Tertiary Education Commission of Tasmania. In 1981 he was awarded the A.O. for services to industry and education.

Mr C. F. Clements is Chairman and Managing Director of Clements Marshall Consolidated Ltd, a Director of ENT Ltd, William Adams Tractors Pty Ltd, Tasmanian Softwoods Pty Ltd, and of a number of other Tasmanian based companies, and a Commissioner of the Australian National Railways Commission.

Under its legislation the Authority is required to exercise its powers in such a manner as will best contribute to:

- (i) the stability of business undertakings in Tasmania;
- (ii) the maintenance of maximum employment in Tasmania; and
- (iii) the prosperity and welfare of the people of Tasmania.

Its principal functions include the following:



- (i) to develop and carry out measures to encourage, monitor and promote employment in the private sector in Tasmania;
- (ii) to develop and carry out measures to promote investment in Tasmania;
- (iii) to promote co-operation between the public and private sectors for the purpose of any such measures;
- (iv) to support and expand existing business undertakings and business opportunities in Tasmania;
- (v) to conduct research for the purpose of the development or establishment in Tasmania of business undertakings;
- (vi) to disburse monies payable to the State under specified Commonwealth/State Agreements, and for disaster relief.

The Authority comprises three main Divisions, namely Development, Lending, and Corporate Services. Their functions are briefly outlined below:

#### *Development Division*

This Division is responsible for: the efficient provision of assistance to existing businesses so that they can expand and/or diversify; the encouragement of the establishment of new industries in the State, thus widening the State's industrial base; the initiation of further downstream processing by existing industry; assistance with the co-ordination of major development proposals; assisting local firms to increase the sales of their products interstate and overseas; promoting Tasmania and its investment potential, as well as the Authority and its services; and the provision of an economic research and corporate analysis service.

#### *Lending Division*

This Division is responsible for rural and housing loan programs. Rural loan programs encompass the Fisheries Finance Plan; the Young Farmer Establishment Finance Scheme; long term lending to primary producers to augment existing sources of finance; disaster relief; and finance for restructuring purposes. The housing loan programs encompass term lending to moderate and low income earners for the purchase and construction of dwellings.

Financial assistance is provided to both existing and new industry in the form of loans, grants and guarantees.

The Division also provides advice and assistance with the examination of the financial viability of projects, businesses, and, where necessary, business reconstruction.

#### *Corporate Services Division*

This Division is responsible for the administrative, financial and personnel aspects of the Authority, including management information services.

It is also responsible for the taking of appropriate security for advances, debtor administration, internal control, and also funds management which form part of the total support services provided by the Authority.

### **Major Industries**

*Source of Data: In normal circumstances, the Bureau of Statistics does not publish information relating to any single enterprise or establishment, and treats any such information it collects as strictly confidential. It does, however, publish statistical aggregates where they do not directly or indirectly reveal the operations of any single informant. A description of industrial development without mentioning individual organisations is not very illuminating; therefore, the Tasmanian Development Authority has prepared the following section and accepts responsibility for the information given.*

*Associated Pulp and Paper Mills Ltd (Burnie, Wesley Vale, Long Reach, Triabunna):* This group of companies which is a wholly-owned subsidiary of North Broken Hill Holdings Ltd, is a major Australian integrated forest products complex and Australia's principal producer of fine printing and writing papers, magazine papers and coated papers. In Tasmania the Company operates major manufacturing complexes at four centres: (i) *Burnie*—where it commenced paper production in 1938; present annual capacity of the Burnie pulp and paper plant is 130 000 tonnes. In addition the Company

presently has three sawmills at Burnie and Wynyard through its wholly owned subsidiary company, Burnie Timber Pty Ltd but at present only two are operating. The Company also acquired, in 1979, Tasmanian Plywood Mills Pty Ltd which is based at Somerset.

(ii) *Wesley Vale*—In 1970 the first stage of an integrated pulp and paper complex was completed when the first paper machine commenced production. The machine has an annual capacity of about 60 000 tonnes of paper. Production at Wesley Vale is mainly of magazine papers. A particle board factory, run by the subsidiary Burnie Timber Pty Ltd, also operates at Wesley Vale; annual production is about 15 million square metres.

(iii) *Long Reach*—APPM completed its woodchip plant and made its first export shipment in 1972. The Company has long-term contracts for the export of woodchips to Japan.

(iv) *Triabunna*—In 1979 APPM took over Tasmanian Pulp and Forest Holdings Ltd which operates a woodchip export mill at Triabunna and also has long-term contracts with Japan.

*Australian Newsprint Mills Ltd (Boyer)*: Since beginning operations in 1941, this Company has increased its annual production of newsprint from 27 400 tonnes to its present capacity of 220 000 tonnes in Tasmania. The Company also operates a newsprint mill at Albury in New South Wales with an output of 180 000 tonnes per annum. ANM is Australia's only producer of newsprint and currently supplies approximately 85 per cent of Australia's requirement. The Boyer plant is being constantly upgraded and in the past 12 months more than \$3 million was spent on improving production efficiency and, in addition, two new paper winders at a cost of \$5.1 million were installed to replace existing equipment and further improve product quality. ANM is the largest company with its head office in Tasmania and indicates that there is an optimistic future for expansion of its operations in this State.

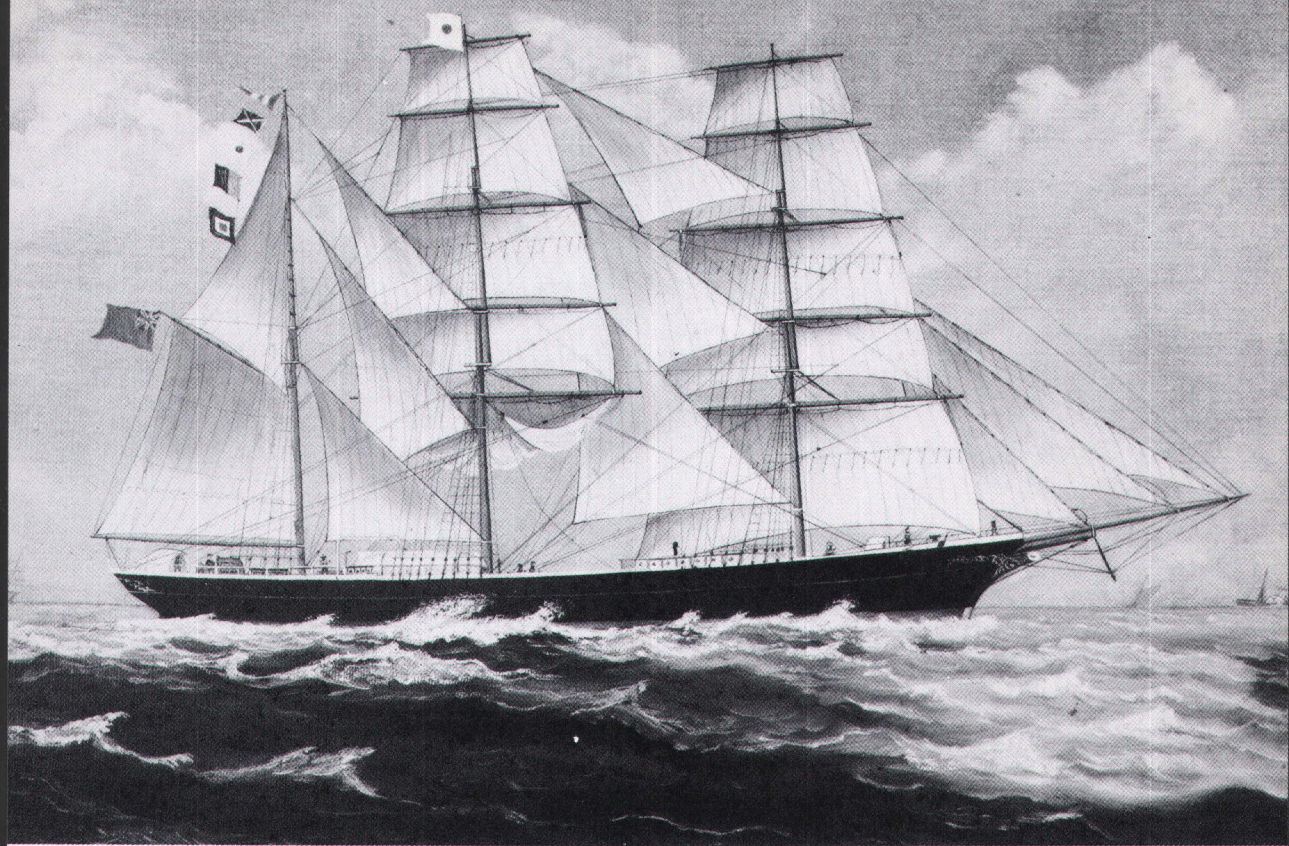
*Cadbury Schweppes Australia Ltd (Claremont)*: In 1921 an association of three British confectioners established their Australian plant at Claremont, near Hobart. Today, the plant is the largest cocoa and confectionery factory in Australia. The factory employs some 700 Tasmanians and specialises in moulded chocolate blocks, fancy boxed assortments, cocoa, drinking chocolate and the well known Flake and Turkish Delight bars. Some 30 million litres of fresh Tasmanian milk are used each year, most of which is collected and processed at a subsidiary dairy factory at Burnie. Large quantities of famous Cadbury Dairy Milk Chocolate are sent each year to the Company's sister factory in Victoria.

*Cascade Group of Companies (Statewide)*: The Company is the oldest manufacturing company in Australia and is firmly established in the beverage industry at manufacturing, wholesale and retail levels. The Company manufactures alcoholic beverages through the only two breweries in the State: at Esk Breweries, Launceston (Boags Beer) and Cascade Brewery, Hobart (Cascade Beer). The Cascade Fruit Juices Division manufactures alcoholic cider under the brand names *Mercury* and *Van Diemen*, and also *Apple Isle* non-alcoholic cider, *Ultra-C* blackcurrant vitamin C syrup, soft drinks, pure fruit juices, fruit juice syrups, berry fruit pulps and concentrates for local and export distribution at Cascades, Hobart. The Company has large pastoral interests centred on Rushy Lagoon, a property of approximately 18 000 hectares situated 160km from Launceston. The wholesaling of wine and spirits is the largest operation in the State with major outlets in Hobart, Launceston and Ulverstone. The Company owns 44 hotels spread throughout the State, the majority of which are leased to individuals.

*Coats Patons (Aust.) Ltd (Launceston)*: This Company first produced yarns in Tasmania nearly 60 years ago. The factory produces knitting yarns, both wool and synthetic, and annual production is approximately 1.5 million kilograms.

*Comalco Aluminium (Bell Bay) Ltd (George Town)*: An aluminium smelter and refinery commenced production in 1955 at Bell Bay under Federal Government ownership. In 1961 the plant and facilities were acquired by the present Company which has increased production of aluminium nine-fold. Products made include rolling block, extrusion billet, foundry ingot, bus bar (horizontally cast), sows, T-ingot and granules. An associated



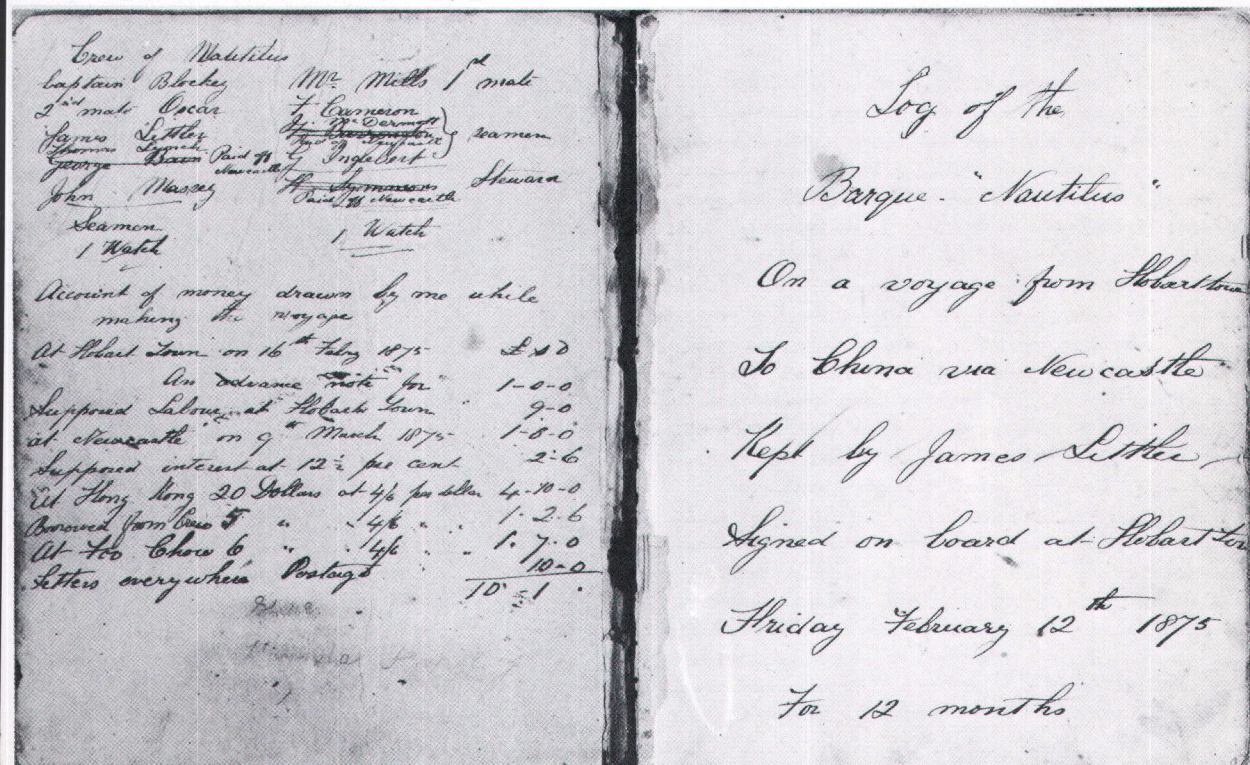


The 'blue gum clipper' Nautilus, circa 1875

[Tasmanian Maritime Museum]

Ship's log of the Nautilus; title and facing pages

[W.L. Crowther Library,  
State Library of Tasmania]







*Salamanca wharves, Hobart, 1866. Bayley's whaling barque Runnymede is second from the left. The Bayley home, prominent on Battery Point, was to become the Lenna homestead after the Bayleys moved to Runnymede House, New Town.*

[W.L. Crowther Library, State Library of Tasmania]



*The Hally Bayley, circa 1880. Built in 1869 in Hobart, the vessel was principally engaged in the Bass Strait trade.*

[W.L. Crowther Library, State Library of Tasmania]



*Captain James Bayley and his daughter Harriet Louisa (Hally), circa 1868.*

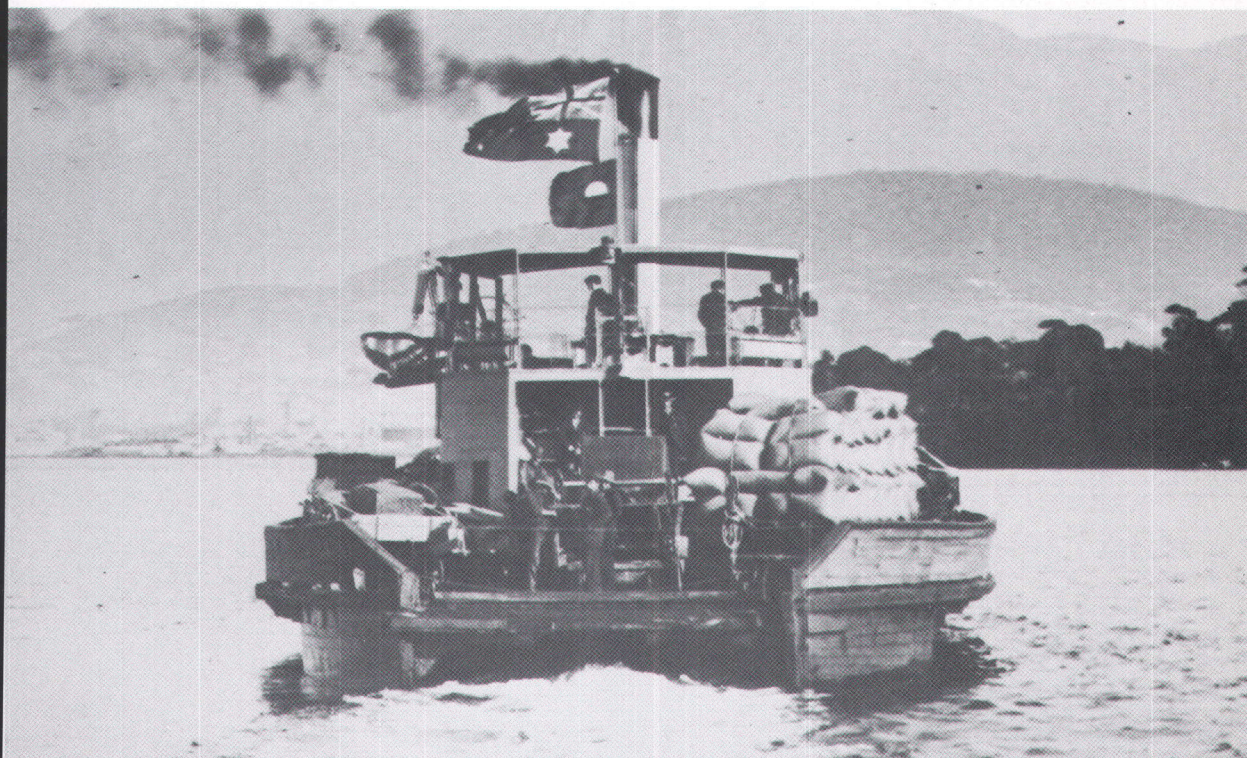
[Courtesy of Miss E. Bayly, New Town]





*The Eucalyptus on John Ross' slip, Battery Point circa 1862. The 195 tonne barque was launched in Hobart Town in 1852. The building behind is Secheron House, now the home of the Tasmanian Maritime Museum.*

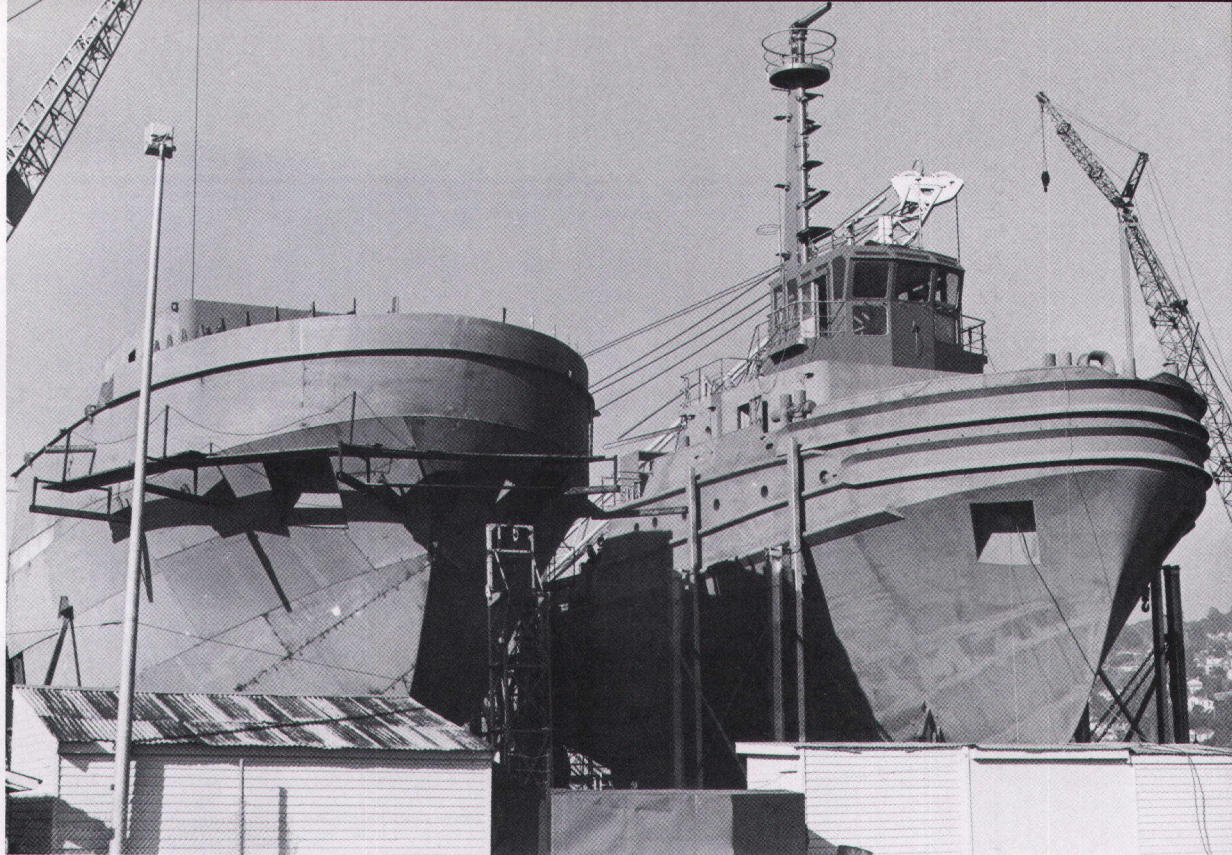
*[Allport Library and Museum of Fine Arts, Hobart]*



*The Derwent paddle-steamer Kangaroo, launched in Hobart in 1855, circa 1920.*

*[W.L. Crowther Library, State Library of Tasmania]*





*Tug building, Tamar Steel Boats, Launceston.*

[Tasmanian Development Authority]

*Locally developed catamaran ferry, International Catamarans, Hobart.*





company, Comalco Aluminium Powder, produces aluminium powder, aluminium paste and high alloy briquettes.

*Edgell, Division of Petersville Ltd (Devonport and Ulverstone):* This company is Tasmania's leading processor of frozen and canned vegetables. The annual volume of raw materials required by the Ulverstone and Devonport factories is approximately 150 000 tonnes, the main crops processed being potatoes, green peas and green beans.

*Electrolytic Zinc Company of A/Asia Ltd (Risdon and Rosebery):* Established in 1916, the factory at Risdon is the largest producer of zinc in Australia and the second largest electrolytic-zinc plant in the world. It exports an extensive range of zinc and zinc alloys to over 30 countries. The Risdon plant has the capacity to produce more than 600 tonnes of zinc per day. Apart from the zinc and zinc alloys, the company also produces cadmium, sulphuric acid, superphosphate, and aluminium sulphate. The zinc plant supplies a large proportion of Australia's total requirements.

Mine production capacity at the Company's West Coast mines at Rosebery is 650 000 tonnes of silver-lead-zinc-copper-gold ore per annum. The associated concentrating mill at Rosebery has capacity to treat 850 000 tonnes of ore per annum including treatment of ore from the Que River mine.

*General Elders IXL Jones Pty Ltd (Smithton and Scottsdale):* General Jones is a wholly owned subsidiary of Henry Jones (IXL). It produces frozen vegetables, of which the main brands are Copper Kettle and Pict. In 1981 freezer capacity was increased and production facilities were upgraded at both plants.

*Goliath Portland Cement Co Ltd (Railton):* The Company began production in 1930 with an annual output of 66 000 tonnes of cement. Plant capacity now stands at one million tonnes of cement per annum and the Company operates its own 4 000 tonne ship, the *M.V. Goliath*, to transport bulk cement to mainland markets. In 1979 it acquired the Cornwall Coal Co. N.L., Tasmania's only coal producers.

*Humes Ltd (Statewide):* Humes produce pre-cast concrete, UPVC and high density polyethylene pipes and fittings for a wide range of uses. The Company's Steel Division plant at Burnie prefabricates reinforcing mesh and rod. Steel Mains Pty Ltd, a subsidiary company manufactures water, steam and oil lines up to six metres in diameter. This company also produces pressure vessels, spheres, bulk storage tanks etc. A field crew operates throughout the State installing all types of structural steel, pipelines and mechanical items. A subsidiary company, Tita Fittings Pty Ltd manufactures brass fittings used in connection of polyethylene pipes. ARC Engineering Pty Ltd, another subsidiary company produces steel reinforcement and mesh. A field crew operates throughout the State installing all types of structural steel, pipelines and mechanical items.

*National Textiles Ltd (Devonport):* Previously Tootal Australia Pty Ltd, established 1952, manufacturers of woven man-made fibre fabrics in polyester/cotton, and polyester/viscose blends for the workwear and fashion dress goods markets. The Company manufactures in Devonport, and at Rutherford and Kotara in New South Wales. Australia wide distribution is through its own selling offices located in all capital cities.

*Repco Bearing Co. (Launceston):* In 1949 this company was established to manufacture engine bearings for the Australian automotive spare parts trade. The factory has since expanded and diversified its range of products and is now the only automotive bearing manufacturing company in Australia. The Company also undertakes general contract machining, precision tool making, and the manufacture of sintered products using powder metallurgy techniques.

*Sheridan Textiles (Derwent Park):* Formerly known as UTA Hobart, then Sheridan Domestic Textiles, is part of the Clothing, Footwear and Textile Group of Dunlop Olympic Ltd. The Derwent Park mill commenced operations as Silk & Textile Printers Pty Ltd in 1948. Production now involves the preparation, dyeing and printing of mainly polyester/cotton percale bed sheeting along with some commission printing. The mill also manufactures a full range of quality made-up domestic bed linen and shower curtains for Australian and export distribution.

*Stanley Works Pty Ltd (Moonah): A Division of the Stanley Works Pty Ltd:* Tasmania's only manufacturer of hand tools commenced production of a range of extruded plastic screwdriver handles in 1983 with a capital investment of \$800 000. Also, a range of screwdrivers for export will be produced in 1984. A computerised manufacturing control system was commissioned as of December 1983.

*Tasmanian Electro-Metallurgical Co. Pty Ltd (Bell Bay):* In 1962 BHP transferred its major alloy making from Newcastle to a green field site at Bell Bay. Expansion in 1976 gave export capacity and added ferro-silicon and manganese ore sinter to the existing produce range of high carbon ferro-manganese and silico-manganese. Production of HMS alloy was added to its product line in 1983. Exports form a significant proportion of production, and are being made to steelmakers and foundries in SE Asia, the Middle East and around the Pacific Basin. Capacity is now about 150 000 tonnes per annum of ferro alloys and 250 000 tonnes per annum of manganese ore sinter. Due to a downturn in the world steel industry, operations during 1982 were reduced. Full plant operations resumed in January 1983.

*Tioxide Australia Pty Ltd (Burnie):* This Company is a manufacturer of titanium pigments which are used as the base white pigment in paints, enamels, plastics, printing inks, rubber, paper, man-made fibres and a number of other products. At the present time, 10 different grades of pigment are made to meet the varying requirements of user industries. The Company was formed in 1937 as Australian Titan Products Pty Ltd. Plans for construction of the Heybridge plant were delayed by the Second World War and the factory was commissioned in December 1948. The initial annual output was 1 500 tonnes compared with a current capacity of 32 000 tonnes. The Company commenced a \$6.5 million capital program of modernisation during 1982 in order to maintain its competitive position. Tioxide is the predominant supplier of titanium pigments to the Australian market and an increasingly significant supplier to SE Asian countries. A staff of approximately 375 was employed in mid-1983.

*United Milk Tasmania Ltd (Smithton, Wynyard, Devonport, Legerwood):* This is one of the State's largest manufacturers of dairy products and processes approximately 70 per cent of the milk produced in the State. Annual production has recently reached approximately the following levels: butter (salted and unsalted), 5 500 tonnes; cheese (cheddar), 9 000 tonnes; milk powders (skim, full cream and buttermilk), 8 000 tonnes; whey powder, 500 tonnes; casein (acid), 500 tonnes; whey proteins (35 per cent, 50 per cent and 75 per cent) 750 tonnes. The Company also operates retail produce/hardware stores and a farm machinery business servicing rural areas.

## MANUFACTURING STATISTICS

### Selected Articles Manufactured

The articles listed below do not include the following important Tasmanian products: aluminium, automotive engine bearings, cement, confectionery, ferro-manganese alloys, hand tools, hardboard, iron ore pellets, particle board; printing, writing and wrapping papers, starch, titanium dioxide, canned, dehydrated and quick frozen vegetables, woodpulp, woollen manufactures, and other textile products. Where there are only one or two producers or where one producer dominates, it is not possible to publish details for articles that would otherwise be included. Some articles, although important manufactures, such as cakes, pastry and pies, wooden furniture and joinery (excluding doors) are not included, as value details only are collected for such items.

The following table lists selected articles manufactured in Tasmania for recent years:



## Selected Articles Manufactured: Quantities, Tasmania

Article	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Acid, sulphuric .....	t 522 154	414 644	302 550	253 547	335 507	292 323
Aerated waters .....	'000 l 20 082	19 834	18 361	19 397	19 108	n.a.
Apples, preserved (solid pack) .....	t 5 215	4 740	3 922	4 941	4 016	5 185
Bacon and ham .....	t 2 505	2 457	2 094	2 375	2 634	2 660
Bricks, blocks, etc. ....	'000 64 116	59 665	63 154	62 990	54 468	45 413
Butter (a) .....	t 7 910	7 075	r 5 490	n.p.	3 964	5 768
Cheese .....	t 13 903	17 494	r 15 328	r 14 147	15 167	14 100
Concrete, ready mixed .....	m <sup>3</sup> 288 466	260 367	250 021	249 715	226 702	208 185
Flour .....	t 32 780	34 901	37 269	37 811	35 068	n.a.
Paper, newsprint .....	t 207 621	208 143	221 460	214 446	219 429	222 934
Superphosphate .....	t 97 012	151 489	132 783	139 869	126 416	104 324
Timber—						
Sawn, peeled or sliced (b)—						
Hardwood .....	'000 m <sup>3</sup> 299.3	289.2	287.6	298.3	255.6	171.6
Softwood .....	'000 m <sup>3</sup> 39.3	31.3	67.6	75.6	71.7	64.3
Dressed—						
Floorboards .....	'000 m <sup>3</sup> 37.2	28.1	51.2	14.8	n.y.a.	n.y.a.
Weatherboards .....	'000 m <sup>3</sup> 0.3	0.4	1.7	n.p.	n.y.a.	n.y.a.
Other .....	'000 m <sup>3</sup> 69.3	65.6	116.1	47.5	n.y.a.	n.y.a.
Woodchips, etc. (greenweight) (c) .....	'000 tonnes 2 838	2 978	3 673	3 428	3 119	3 168
Zinc, refined .....	t 161 173	204 623	191 683	188 471	193 714	185 482

(a) Includes butter equivalent of butter oil.

(b) Includes timber to be further processed.

(c) Defined in forestry section of Chapter 13.

## Manufacturing Censuses

Annual censuses of factories have been conducted from almost the start of the present century; the last 'old style' factory census covered the year 1967-68. For 1968-69 simultaneous integrated economic censuses were undertaken in respect of manufacturing and four other sectors (mining; wholesale trade; retail trade and electricity and gas production and distribution).

The 1968-69 integrated economic censuses were fully described in Appendix A of the 1972 *Year Book* in which there also appears an explanation of the factors which made necessary the termination of 'old style' factory censuses and the start of a new series, based on new reporting units and data concepts. In the following section, the results of the manufacturing census for 1981-82 are given.

Definitions and data concepts applying to the integrated economic censuses will be found in the section 'Integrated Economic Censuses' in Chapter 19 of this edition. Also, results from manufacturing censuses are compared with those from integrated economic censuses covering other industry sectors in that section.

## Census Results

*Manufacturing Establishments Classified According to Industry*

The table that follows contains a summary of the principal manufacturing statistics by industry sub-division. Single establishment enterprises employing less than four employees at 30 June 1982 are excluded from this table:

## Manufacturing Establishments: Operations by Industry Sub-division, Tasmania 1981-82

ASIC code (a)	Industry sub-division  Description	Estab- lish- ments operat- ing at 30 June	Employment			Wages and salaries	Turn- over
			Males	Females	Persons		
		<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>\$'000</i>	<i>\$'000</i>
21	Food, beverages and tobacco .....	113	3 751	1 714	5 465	67 756	507 821
23	Textiles .....	10	871	926	1 797	21 194	69 208
24	Clothing and footwear .....	5	81	127	208	1 945	7 296
25	Wood, wood products and furniture .....	143	3 350	208	3 558	44 854	229 121
26	Paper, paper products; printing and publishing .....	49	4 723	697	5 420	90 005	395 547
27	Chemical, petroleum and coal products .....	16	921	54	975	18 009	100 883
28	Non-metallic mineral products .....	46	780	54	834	13 470	79 356
29	Basic metal products .....	10	3 524	121	3 645	62 049	321 570
31	Fabricated metal products .....	77	1 544	229	1 773	21 518	90 461
32	Transport equipment .....	21	591	170	761	10 858	40 376
33	Other machinery and equipment ..	39	845	94	939	13 166	34 794
34	Miscellaneous manufacturing .....	26	364	70	434	5 343	21 612
Total manufacturing .....		555	21 345	4 464	25 809	370 167	1 898 045

## Manufacturing Establishments: Operations by Industry Sub-division, Tasmania 1981-82—continued

ASIC code (a)	Industry sub-division  Description	Stocks		Purch- ases, transfers in and selected expenses	Value added	Rent, leasing, and hiring expenses (b)	Fixed capital expen- diture
		Opening	Closing				
		<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>
21	Food, beverages and tobacco .....	52 851	60 910	362 341	153 540	4 223	9 417
23	Textiles .....	17 577	18 398	39 435	30 595	694	1 733
24	Clothing and footwear .....	556	665	4 209	3 195	91	62
25	Wood, wood products and furniture ..	41 002	48 955	141 531	95 543	2 457	5 031
26	Paper, paper products; printing and publishing .....	49 274	45 818	228 754	163 337	3 265	31 945
27	Chemical, petroleum and coal products .....	24 138	23 394	64 428	35 710	2 120	1 711
28	Non-metallic mineral products .....	9 569	11 774	49 225	32 336	633	2 302
29	Basic metal products .....	70 933	98 732	244 226	105 142	666	25 179
31	Fabricated metal products .....	14 968	16 449	53 849	38 093	1 038	2 612
32	Transport equipment .....	7 628	16 559	22 039	27 267	236	2 587
33	Other machinery and equipment ..	5 663	5 029	15 796	18 365	413	679
34	Miscellaneous manufacturing .....	3 355	3 331	11 622	9 966	392	1 160
Total manufacturing .....		297 514	350 015	1 237 455	713 091	16 230	84 417

(a) Australian Standard Industrial Classification code.

(b) Outlay on fixed tangible assets less disposals.

## Manufacturing by Statistical Division

The next table shows, as a time series, the chief measures of manufacturing operations by statistical divisions:

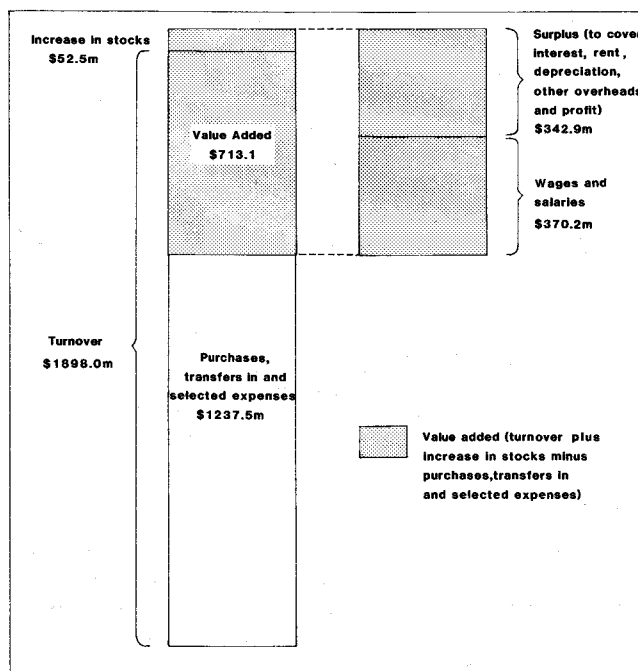
## Manufacturing Establishments: Main Items by Statistical Division (a)

Main items	Unit	Year ended June	Statistical divisions			Tasmania
			Hobart and Southern	Northern	Mersey-Lyell	
Number of establishments .	no.	1980	219	187	137	543
		1981	226	195	137	558
		1982	218	201	136	555
Employment(b)—						
Males .....	no.	1980	8 424	6 784	6 312	21 520
		1981	8 446	7 093	6 403	21 942
		1982	8 227	6 870	6 248	21 345
Females .....	no.	1980	1 678	1 440	1 520	4 638
		1981	1 751	1 464	1 371	4 586
		1982	1 680	1 382	1 402	4 464
Persons .....	no.	1980	10 102	8 224	7 832	26 158
		1981	10 197	8 557	7 774	26 528
		1982	9 907	8 252	7 650	25 809
Wages and salaries .....	\$'000	1980	106 383	94 185	97 628	298 196
		1981	127 541	112 622	106 388	346 551
		1982	136 216	119 264	114 687	370 167
Value added .....	\$'000	1980	230 767	236 708	186 295	653 770
		1981	232 627	257 497	223 320	713 445
		1982	251 172	246 693	215 226	713 091
Fixed capital expenditure ..	\$'000	1980	18 048	16 976	20 909	55 933
		1981	23 275	18 312	18 620	60 208
		1982	15 513	32 461	36 443	84 417

(a) Excludes details for single establishment enterprises employing less than four persons at 30 June.

(b) Includes working proprietors; figures are average over whole year.

## Manufacturing Establishments, Value Added, Tasmania, 1981-1982



### Tasmania in Comparison with Other Australian States

A comparison of Tasmanian manufacturing activity with that of the other Australian states and territories is shown in the following table. Applying the appropriate population relativity factors to the figures, it will be seen that, on the basis of the resulting values, Tasmania is relatively more industrialised than Queensland, Western Australia, the Northern Territory and the Australian Capital Territory and approaches the level of South Australia.

**Tasmania-Australia Comparison of Manufacturing Activity, 1981-82**

State or territory	Popula- tion relativity (a)	Estab- lish- ments	Wages and salaries	Turn- over (b)	Stocks		Pur- chases, etc. (c)	Value added
					Opening	Closing		
Actual Value								
		no.	\$m	\$m	\$m	\$m	\$m	\$m
NSW .....	12.3	10 625	6 623	29 538	4 854	5 051	17 910	11 825
Vic. ....	9.3	8 916	5 757	27 208	4 200	4 601	17 031	10 578
Qld. ....	5.6	3 556	1 700	10 590	1 154	1 328	7 316	3 448
WA .....	3.1	2 603	1 013	5 491	673	736	3 501	2 053
SA .....	3.1	2 219	1 446	6 651	1 101	1 154	4 084	2 620
Tasmania .....	1.0	555	370	1 898	298	350	1 238	713
NT .....	0.3	106	43	297	83	78	231	61
ACT .....	0.5	126	49	188	14	17	112	78
Total Australia ...	35.1	28 706	17 001	81 862	12 377	13 315	51 421	31 378
Values Relative to Population (d)								
NSW .....	12.3	864	538	2 401	395	411	1 456	961
Vic. ....	9.3	959	619	2 926	452	495	1 831	1 137
Qld. ....	5.6	635	304	1 891	206	237	1 306	616
WA .....	3.1	840	327	1 771	217	237	1 129	662
SA .....	3.1	716	466	2 145	355	372	1 317	845
Tasmania .....	1.0	555	370	1 898	298	350	1 238	713
NT .....	0.3	353	143	990	277	260	770	203
ACT .....	0.5	252	98	376	28	34	224	156
Total Australia ...	35.1	818	484	2 332	353	379	1 465	894

(a) Tasmania's total mean population for 1981-82 is expressed as 1.0; other State populations in proportion to 1.0.

(b) Sales, transfers out and other operating revenue.

(c) Purchases, transfers in and selected expenses.

(d) Figures are calculated by dividing the actual figures by the appropriate population relativity factor. They do not represent direct per head of population details but merely a comparison of the degree of manufacturing activity in each State relative to population.

### Tasmania-Australia Comparison

In 1981-82 the Tasmanian share of Australian employment in manufacturing was 2.31 per cent; and of Australian 'value added' in manufacturing, 2.27 per cent. (Tasmanian's mean population as a proportion of Australia's for 1981-82 was 2.85 per cent.)

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No. 5: Building Materials and Fittings (8361.0).

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No. 7: Motor Vehicles, Parts and Accessories (8363.0).

No. 8: Miscellaneous Products (8364.0).

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## SHIPBUILDING IN TASMANIA

## Historical Background

While Van Diemen's Land's resources offered opportunities, both for direct exploitation and for resource-based industries to develop, many restrictions were imposed for security reasons during the convict settlements' early years. Despite this an unruly sealing industry developed, centred on Bass Strait islands, with 'large double-ended boats' having been constructed from the wreck of the East India Company's *Sydney Cove* on Preservation Island in 1804. Many sealers were escaped convicts and locally constructed craft were used to visit outlying islands and to barter seal skins with visiting vessels en route to England or China. Free settlers, however, were refused permission to build private vessels, and until 1812 Hobart remained a closed port with entry to non-government vessels restricted.

The first vessel recorded as having been launched on the Derwent was the *Henrietta Packett*, a schooner of 40 tonnes launched in 1812, and in the following year the 133 tonne brig *Campbell Macquarie* was launched. Both vessels were privately built by whaling interests. Conventional tools were scarce and pitsawn planks were attached to wooden frames with treenails (wooden pegs). Early Hobart entrepreneurs such as Dr T. W. Birch, builder of the *Henrietta Packett*, used locally built vessels in exploration and the export trade to Sydney as well as their main purpose of whaling. Colonial-born Captain James Kelly, in the *Henrietta Packett*, discovered Port Davey and Macquarie Harbour in 1815, leading to the harvesting of valuable Huon and celery-top pine and a boost in shipbuilding.

In the decade to 1838 Government statistics indicate that an average of 10 vessels per year were constructed at an average gross tonnage of 50 tonnes. Macquarie Harbour, a convict settlement since 1821 and the site of a government shipyard utilising local timber, was closed in 1833 in favour of Port Arthur. Under Governor Arthur substantial industry was undertaken at Port Arthur, including shipbuilding and the supply of

shipbuilding materials and boats. When a large vessel was launched at Port Arthur in 1838 and offered for public sale, the local press decried such government enterprise, but demand for all vessels was high at the time. A lucrative export trade across Bass Strait to new settlements at Port Phillip and Portland developed from the mid-1830s and was a further stimulus to shipbuilding.

During the early 1840s the Derwent was occupied by many English, French and American whalers as well as the local fleet. Hobart Town was one of the world's great whaling ports. The five years to 1843 saw an average of 43 vessels built per year at an average of 43 tonnes, and in the following five years to 1848, 64 vessels at an average of 86 tonnes were launched despite a period of economic difficulty around 1844.

The five years to 1853 represented the height of shipbuilding activity in Van Diemen's Land. An average of 118 vessels were constructed each year at an average of 78 tonnes, despite whaling being reported to be in decline by 1849. Vessels ranged in size up to the 583 tonne *Tasman*, an early 'bluegum clipper' and the largest ship then built in Australia. The *Flying Childers* built by the Watson brothers at Battery Point, was another famous vessel of the era. The usual construction method was to lay down a single-piece bluegum keel up to 37 metres long, with bluegum planks of similar length cladding the hull. Bluegum was rated by Lloyds Insurance Co. as second only to teak, being stronger and resistant to teredo borers. Production costs of Van Diemen's Land ships were lower than those of other colonies and of Britain. Van Diemen's Land remained until 1849, the second most important colony to New South Wales.

The Victorian gold-rushes resulted in an exodus of Tasmanian labour. The five years to 1858 saw shipbuilding tonnage drop to about 11 per cent of that of the previous five years. At the same time, competition on long, international routes was intensifying with large American clipper ships and later steamships dominating, so that most locally built vessels of the era were used in coastal or interstate trade. A steady increase in Tasmanian shipbuilding from the mid-1850s to the 1880s saw construction tonnages reach about one third of the height of their peak. The same period saw a diversification of Tasmanian export products and a minor resurgence in whaling activities in the 1870s. Technological advancement in the 1870s led to the installation of a modern ship cradle, running on steel rails and hauled by a steam engine, at Battery Point. In 1887 the equipment was used in the launching of the steam-driven dredge *Agnew*, the first iron vessel built in Tasmania.

Shipbuilding declined again during the 1880s and 1890s. The early decades of the twentieth century saw minor fluctuations in shipbuilding activity, but the industry was only a shadow of that of its heyday. Employment in the industry averaged 65 persons although many of these were engaged in maintenance activities.

World War II saw a resurgence in shipbuilding, both in private shipyards and in newly established government yards. The government yard on Prince of Wales Bay, Hobart, at its peak employed 300 persons, most of whom had no prior experience in the industry. Cargo vessels to 300 tonnes as well as shallow-draught hospital vessels and harbour-defence launches were built, using mainly materials of local origin. Vessels built were widely praised for their seaworthiness. Repairs and servicing also increased, despite Tasmania being well south of the range of hostile submarines.

Shipbuilding was the first significant manufacturing industry to develop in Van Diemen's Land. The historical peak of Tasmanian shipbuilding occurred around 1850 in response to demands for trading and whaling vessels. The industry declined from then and, apart from a minor resurgence around 1870 and a period of activity generated by the 1940s war effort, was relatively insignificant.

### Modern Tasmanian Shipbuilding

Local resources were fundamental to the origins and early development of shipbuilding in Tasmania. The island nature of the State at once exacerbated transport difficulties and allowed access to abundant marine resources. Such factors are still important, but technological advances have radically affected the shipbuilding industry. Transport continues to be a stimulus to shipbuilding with a diversity of vessels performing

specialised roles. The exploitation of marine resources has similarly continued to generate shipbuilding, with recreational vessels also contributing to the industry. Developments in related industries such as air and road transport have had a less direct but nonetheless important influence on the industry.

Modern shipbuilding in Tasmania falls into three principal sectors; fishing vessels, recreational craft and a utility-vessel sector which currently includes construction of tugs and ferries. These industry sectors are to be discussed in terms of current conditions and prospects, recent history and estimated relative importance. External factors and market conditions such as bounty and other incentive schemes will also be considered. Definitions of the lower size limit of ships abound but here are loosely defined as exceeding either one tonne or six metres overall length and having sea-going capability.

### *Fishing Vessel Construction*

Fishing in Tasmania has developed from a domestic service industry to being export oriented following the development of modern processing methods. Rock lobster, scale-fish, scallops, shark and more recently abalone and squid are sought. Recent research has indicated potential for expansion of pelagic and deep-water trawl and squid fisheries. Tasmanian built vessels used locally range from small highly mobile craft to 25 metre vessels of 250 laden tonnes. Most are of traditional deep-hulled design and constructed of steel or timber. Innovations include aluminium and fibreglass hulls, twin-hulled, shallow-draught and planing hull vessels.

Optimal fishing boat size varies not only with the target catch but also with the nature of the fishery and working efficiency obtainable. At 30 June 1980, 781 fishing vessels were registered in Tasmania of which 30.1 per cent were of less than six metres, 32.3 per cent were between six and 12 metres, 35.1 per cent were between 12 and 21 metres and 2.6 per cent were over 21 metres. Bounties are payable to shipbuilders in respect of fishing vessels exceeding either 21 metres on the designed water line or 150 gross construction tonnes. Traditional fisheries chiefly utilise smaller vessels (10-18 metres) but if pelagic and deep trawl fisheries develop, vessels of around 25 metres and above will be required. Some imbalance in the overall composition of some fisheries interstate is reported as having occurred because too many vessels were built to comply with bountiable thresholds rather than usual designs.

### *Timber-hulled Fishing Boats*

Wood is the traditional material for ship and boat construction in Tasmania. Huon, celery-top and King Billy pines are widely esteemed local softwoods with stringybark, blackwood and bluegum among preferred hardwoods. Quality of material is important with mature, clear-grained and well seasoned timber most highly valued. The labour component of wooden boat construction remains high although modern adhesives and power tools have streamlined many processes and techniques used. Laminating, for example, has largely replaced previous techniques such as steam bending and selection of naturally curved timbers.

About ten establishments in Tasmania are primarily engaged in building wooden fishing craft. Numbers are difficult to arrive at because some establishments engage in other manufacturing or in maintenance to a significant degree, especially as demand varies. Establishments are typically small, with between one and nine employees. Boat-builders are generally of the view that quality is especially important to the long-term viability of a business, and that a limited size of operation allows tight quality control. Apprenticeship has been traditional in the industry although skilled labour is also recruited from the building industry. A decline in demand over the past three years has resulted in there currently being only two apprentices in the industry in Tasmania. Despite some statements that wood-working skills were dying out, a range of ages of employed persons is evident. It may be that practices such as the use of 'knees' (natural forked timbers used in framing hulls) being replaced with glued and laminated sections has led to such views.

Preference for wooden vessels over other types is largely personal although wooden boats are not suitable for some fisheries such as scallop dredging. Recent demand has

declined from the post-war situation of boatbuilders having a queue of buyers to most builders having current jobs or alternative work, but no forward orders. Supply of local softwood timbers, which are slow growing and have been heavily depleted, may become a problem. Quality of timber ordered by specification is not always reliable and may result in considerable wastage or in the necessity of inspection at source, prior to purchase. Proposed use of alternative timbers such as treated radiata pine has not eventuated due to doubts about the durability of preservative treatments and of the timber itself. Timber from fully mature trees is preferred since some compression and improvement in durability occurs with age; regrowth timber is usually unsatisfactory.

Contractual arrangements for the building of wooden boats varies considerably. The most usual method in single or two employee operations is for the builder to be paid according to time spent in construction. A variation is the 'do and charge' arrangement where an agreed maximum price is set and the builder proceeds with a degree of autonomy as to detail of work. Some boats are also built to be sold on completion. Design may be the original work of a builder or alternatively supplied by either the builder or buyer. Within establishments bonus arrangements and profit sharing often supplement wages.

No expansion of the use of wooden boats in the fishing industry is anticipated. Bounty payments under present arrangements are unlikely to influence the industry since wooden vessels of bountiable size are rare. Exports are only occasional with marketing generally being low-key and localised. The future of wooden boatbuilding seems assured at about its current level as long as supplies of highly valued local timbers are available.

#### *Steel-hulled Fishing Vessels*

Steel hulls are the cheapest of basic fishing boat designs available. The versatility of steel is important in that repairs, alterations and additions of extra or alternative equipment are relatively easy. Basic equipment and skills used in general steel fabrication may easily be translated to ship and boatbuilding resulting in a high latent capacity of the industry. Non-specialist steel boatbuilders comprise perhaps 50 per cent of the total industry and include fishermen who occasionally build their own boats as well as general engineers who take boatbuilding orders to supplement work normally undertaken. A disadvantage of steel is its vulnerability to corrosion, although thorough initial treatment will largely avoid this problem.

While basic equipment used in steel fabrication may be adapted to boatbuilding, further equipment is required with either increased sophistication of design or generally with increased vessel size. Such equipment as plate-rolling, bevelling, automatic profile-cutting and de-scaling machinery is indispensable, and may be leased, owned or such work may be contracted out. Other equipment such as inert-gas welding equipment, enabling work with aluminium and stainless-steel to be undertaken, is more widely owned. Access to and use of such equipment represents a demarcation between industry professionals and a range of less specialised operations, and seems important in the buyer's decision making process. Both specialist designers and designer-builders indicate that prospective buyers usually specify unique rather than standard designs.

Although the Tasmanian Fisheries Development Authority is required to approve vessels for which low-interest development loans are granted, there is a lack of a general design advice service available as, for example, is provided in many European countries. Designers also report that a lack of general design awareness amongst fishermen is evidenced by their unrealistic initial expectations in terms of inevitable trade-offs between, for example, vessel speed and overall efficiency. Criticism was made of rock lobster license fees being related to a vessel's overall volume—sometimes resulting in highly contrived and non-functional design strategies.

Employment in steel fishing boat construction (in specialised establishments) is estimated to be about 27, although substantial numbers also participate indirectly or for limited periods. Variation in boatbuilding demand has occurred with fluctuations in the fishing industry, which itself is increasingly becoming linked to export markets. The industry appears to be stable, although some expansion may occur if trawl pelagic or squid fisheries develop. An example is a recent sudden surge in construction of steel scallop



boats. There is little doubt that steel will continue to predominate as the principal construction material, although the overall ratio of hull to functional vessel cost has diminished with the use of sophisticated and expensive ancillary equipment.

#### *Other Fishing Boat Types*

Aluminium and fibre-glass are also occasionally used in fishing vessels. Marine grade aluminium resists conventional marine corrosion but must be insulated from contact with other metals and electrical current. Construction involves the use of inert-gas welding and hull costs are usually 30-50 per cent greater than for a comparable steel hull. Lightness in weight is an advantage but aluminium is usually considered too flexible and subject to metal fatigue for rigorous-work boats. One establishment has built 10 metre fast, planing-hull vessels which have proved successful in allowing rapid, versatile access to fishing grounds in changeable weather. Apart from this narrow market area there currently seems little prospect of expansion of the use of aluminium into general fishing vessel construction.

Fibreglass has in the past five years diminished in importance across the entire ship and boat construction industry. Reasons for this seem to be principally a dramatic increase in costs of raw materials although isolated cases of poor construction techniques leading to defects, are cited as having damaged the general reputation of the material. Potential savings are available in that several basic hulls may be cast from a single mould but market demands for unique designs usually circumvent this possibility.

#### *Construction of Recreational Craft*

Recreational vessel demand varies greatly both in level and in quality. A variety of construction materials are used and within each, the sophistication of finish, as well as size, results in substantial price variation. Economic conditions thus greatly influence market demands and are generally reported to have been depressed over the past three years. Sales tax of 20 per cent is seen by manufacturers as a deterrent to some buyers although the market has borne the introduction and prior increases in sales tax rates. Contributions to the industry include work of specialist pleasure-boat builders, general boatbuilders and in some instances other trades.

Wooden recreational craft include motor driven and sailing vessels. A usual feature is a high quality finish utilising local and some imported timbers. The wide esteem of local timbers is cited as being important in this respect, with effective marketing seen by builders as important in underpinning the long term future of the industry. Examples of unique craft generating multiple further orders are cited, but buyers are not always willing to wait for the construction period or longer, especially when some competing craft are usually available 'off the shelf'.

Other recreational craft are constructed from fibre-glass, steel or aluminium. Although common in the size range below the scope of vessels covered here, such vessels are relatively uncommon and of little importance at present. Some builders see potential for expansion in this area although a frequent requirement is that the buyer be able to inspect the craft during progress of construction. Interstate clients may thus be discouraged, although successful repetitive designs may be developed and marketed to overcome this problem. Many builders expressed a preference for small operations with perhaps, at most, three employees. This allows close quality control and reduced administrative work. A long-term consequence is that industry expansion tends to be limited to duplication of current establishments and may be less flexible than through expansion of individual enterprises. Current employment in the construction of sea-going recreational craft is about ten, with flexibility between other boatbuilding activity and some trades such as cabinet-making usually being present.

#### *Utility Shipbuilding—Tugs and Ferries*

Shipbuilding as an export-oriented, broad-based industry is currently undergoing a resurgence in Tasmania. Two enterprises have developed over the past decade to a point where they employ more than the remainder of the domestic boatbuilding industry. While both emphasise the advantages of local labour force conditions, one has developed largely

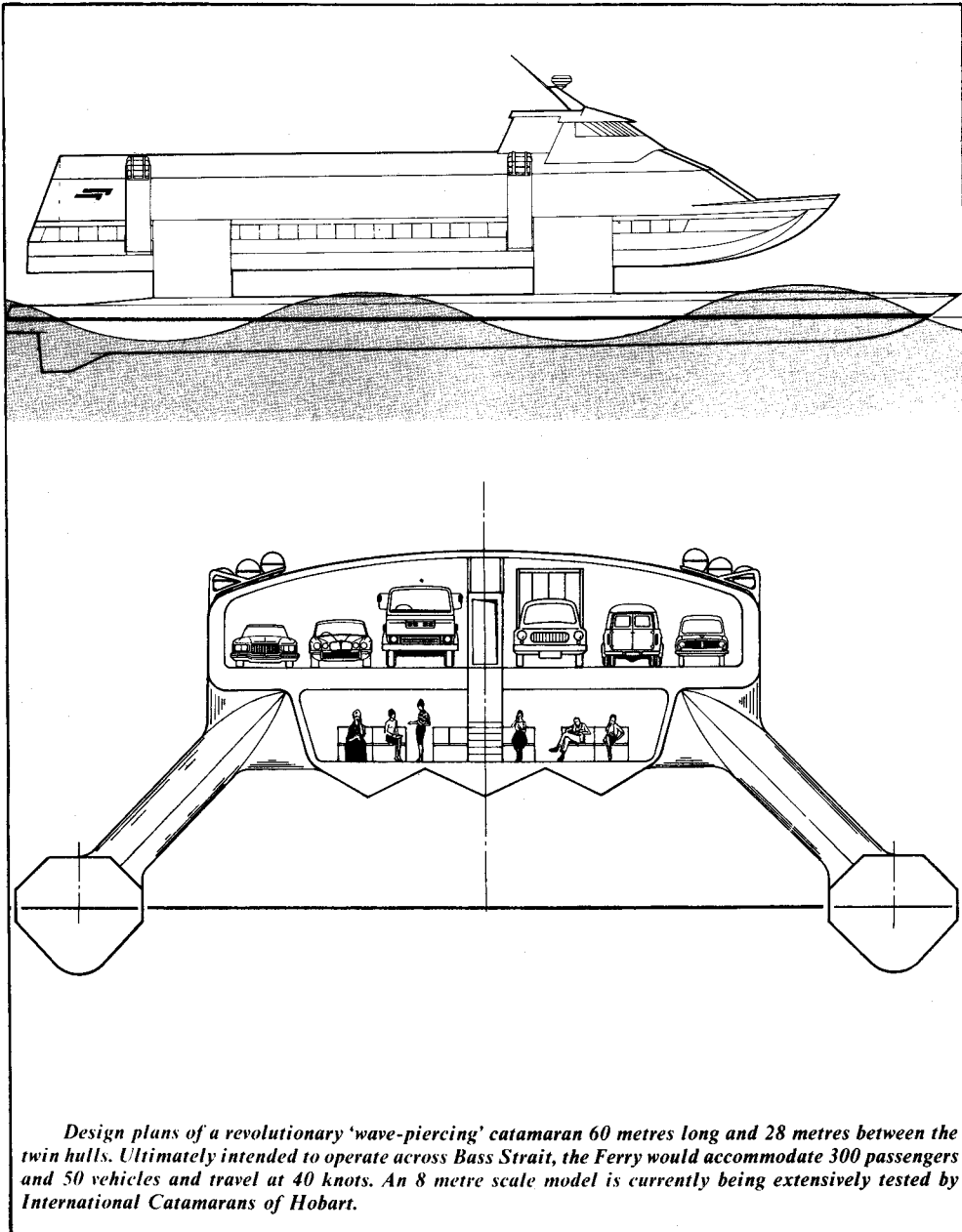
as a result of locally developed innovative design factors, with the other relying on modern although more conventional designs and efficient building practices. The first enterprise is concerned with the building of fast aluminium catamaran ferries and development of ocean-going catamaran ferries while the latter large establishment has largely built tugs but caters for a range of vessels on a highly organised production system. It should also be mentioned that other incidental ship and boatbuilding of this category occurs sporadically, mostly as projects undertaken by established boatbuilders. Most notably in recent years a 32 metre timber ferry for Gordon River scenic cruises was constructed by builders who usually produce wooden fishing boats.

International Catamarans has its origins in the ferry trade that resulted from the collapse of the Tasman Bridge. Bob Clifford, a current director of the Company, was at that time operating conventional ferries which soon proved inadequate. As an alternative a leased hovercraft was tried and although less cramped than conventional ferries, proved to be no more fuel efficient and had unsatisfactory maintenance requirements. The first of the catamaran ferries was designed in consultation with a Sydney marine architect to have steel hulls and an innovative steering system. After tank testing at Sydney University three were built in Hobart. From the customers' point of view these ferries were quiet, fast and spacious and to the operator had most of the advantageous features of hovercraft or hydrofoil. They were initially cheaper and much more efficient to run and maintain. International Catamarans was formed in 1978 by the Sullivan's Cove Ferry Company in partnership with Hercus Marine Design of Sydney.

Catamarans have been used for hundreds of years but as fast, commercial vessels they are relatively new. The cost being perhaps a quarter to a third that of hovercraft or hydrofoils of equivalent capacity, catamarans are less mechanically complex and more efficient in most respects than their competitors. Utility is obtained from the large deck area. To date, all the Tasmanian built catamarans have been passenger ferries but some built under licence in Singapore as oil rig tenders carry 60 tonnes of freight and 12 passengers. To date, of the 17 catamarans built, about half have been constructed in Tasmania with others being built under licence in Cairns, Hong Kong, Singapore and New Zealand. Further licensee-shipyards are currently being sought in the US and with subcontractors to the offshore oil industry.

Since the initial three steel-hulled vessels, all of International Catamarans' vessels have been all-aluminium craft. Aluminium is lighter, easier to work and more resistant to marine corrosion than steel. These features enable cost savings both at the construction stage and in operating the vessel. However the design must compensate for aluminium's greater flexibility and expansion and contraction properties. Aluminium alloys of the required marine grade are initially more expensive than steel plate but have proved more effective as a construction material since subsequent fabrication and fitting out costs are generally lower than for steel. Corrosion has not proved a problem—in this respect vessels have been likened to DC3 aircraft shells with 40 year working lives. Overall success of the craft is attributed to a combination of features in hull design, propulsion, steering and the use of aluminium construction, none of which is in itself revolutionary. Patenting of current registered designs is not considered worthwhile.

Several Tasmanian ferries built by International Catamarans have been sold to Barrier Reef resort operators, including vessels of up to 29 metres licensed to carry 250 passengers. The craft will continue to be built in Tasmania using the locally developed design as long as export or local orders are received. Expansion of function from initial ferry usage to a range of patrol and light defence craft is currently being explored. Marketing has been a problem with orders often coming from chance encounters of potential customers rather than active promotion. The company sees potential benefit from government assistance in this area.



An additional area of International Catamarans' current activity is in the development and testing of a revolutionary "wave piercing" catamaran. This design has streamlined hulls which operate at about 50 per cent submersion and with a superstructure supported by columns above the water surface level. The vessel is designed to withstand rough ocean conditions. An eight metre prototype already constructed will be subjected to exhaustive testing prior to marine survey. A 28 metre passenger ferry has been designed as a forerunner to a vessel 60 metres long, carrying 300 passengers and 50 vehicles across Bass Strait. A Melbourne-Devonport crossing time of 5½ hours is envisaged with fares being competitive with those of the current service.

International Catamarans employs about 10 persons on a regular basis although, including subcontractors, up to 25 are directly working on vessels at some stages. New premises currently being constructed will allow sections of craft, including the proposed wave-piercing model, to be fabricated under cover prior to final assembly and further general expansion of operations. A capacity of four to eight conventional vessels a year and a doubling of the basic workforce is envisaged. Should the wave-piercing model prove successful, considerable further expansion and valuable licensing rights should ensue. In any event, International Catamarans is likely to contribute further to Tasmanian industry.

Tamar Steel Boats developed as a marine engineering works engaged largely in building conventional steel hulled fishing boats. About 20 persons were employed at the Company's original site at Launceston constructing vessels of various sizes up to a 25 metre trawler. To March 1981 the Company relied primarily on the local fishing boat market and conventional steel-fabrication equipment.

A contract to build the *Bluefin*, a 34.5 metre cadet training vessel, for the Australian Maritime College was a breakthrough both in scale and technological application. A new site was obtained which allowed a larger scale of operation together with easy access to the Port of Launceston Authority's submersible 'synchro-lift' wharf. This vessel incorporated features such as multi-chine design and variable pitch propeller, requiring additional expertise as well as manpower. Further contracts were then obtained, largely on the basis of demonstrated expertise, to build a series of 32 metre, 400 displacement tonne tugs. The scale of these projects supported the Company's requisition of advanced technology machinery such as automatic profile cutters, bevellers, plate rollers and lifting capacity. While these have allowed higher production levels, the Company is now somewhat committed to a high level of activity. Subsequent orders for similar tugs are now being completed.

Tamar Steel Boats' diversification has led not only to a high level of capital equipment being utilised but also the development of a range of skills and expertise not previously required. An example of this lies in the need for ongoing supervision and design by a marine architect since many contract specifications are not sufficiently detailed to be used as working plans. Similarly, services for vessels constructed such as air-conditioning and electrical services are completed by subcontractors appointed and supervised by the Company. Initial basic designs have also included recent design innovations such as variable-pitch propellers for fishing trawlers and propellers with 360 degrees lateral rotation for tugs. While the Company's preference will continue to lie with building larger vessels, smaller vessels such as 15-20 metre fishing boats are built concurrently as orders are received. This market area is seen as being complementary to that of larger vessel construction, although it is not sufficient in itself to maintain the Company at its present level.

Tamar Steel Boats currently has a stable workforce of about 60, including two apprentices. Allan Fogarty, a director and founder of the Company, expresses a preference for a workforce of about this size so that employees may all be known by sight and name. Some competitive advantage is also seen in slightly lower wage levels and a more temperate industrial climate than other States. Bounties have been paid on larger vessels built but, although freight equalisation subsidies are available for most imported materials, delivery costs of completed vessels to interstate ports are expensive and not subject to subsidy. The Company's present aim is to maintain its reputation as an efficient builder of specialised small ships and to build other vessels as opportunities allow.

In summary, Tasmanian shipbuilding is experiencing an upsurge in activity. This is related to an expansion in the export-fisheries and the development of shipyards building ferries and tugs which are primarily for export. Prior surges in local shipbuilding activity occurred during World War II and, especially, during the 1850s.

Local shipbuilders express confidence in the industry provided that markets are available. Additional expansion may occur in the development and manufacture of high-technology catamaran ferries and sophisticated recreational craft.

## **CHAPTER 15**

### **ENERGY**

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## Chapter 15

### ENERGY

#### ENERGY IN TASMANIA

In 1982-83 primary energy consumption in Tasmania was almost 81,000 petajoules. Most was supplied by petroleum products (44%) and hydro-electricity (36%). Small amounts were derived from black coal (10%) and wood (8%). The manufacturing industry was the largest consumer of energy using 41 per cent, transport took 25 per cent (all in the form of petroleum products) and the residential sector used 15 per cent.

#### Net Energy Consumption, Tasmania (Petajoules) *r*

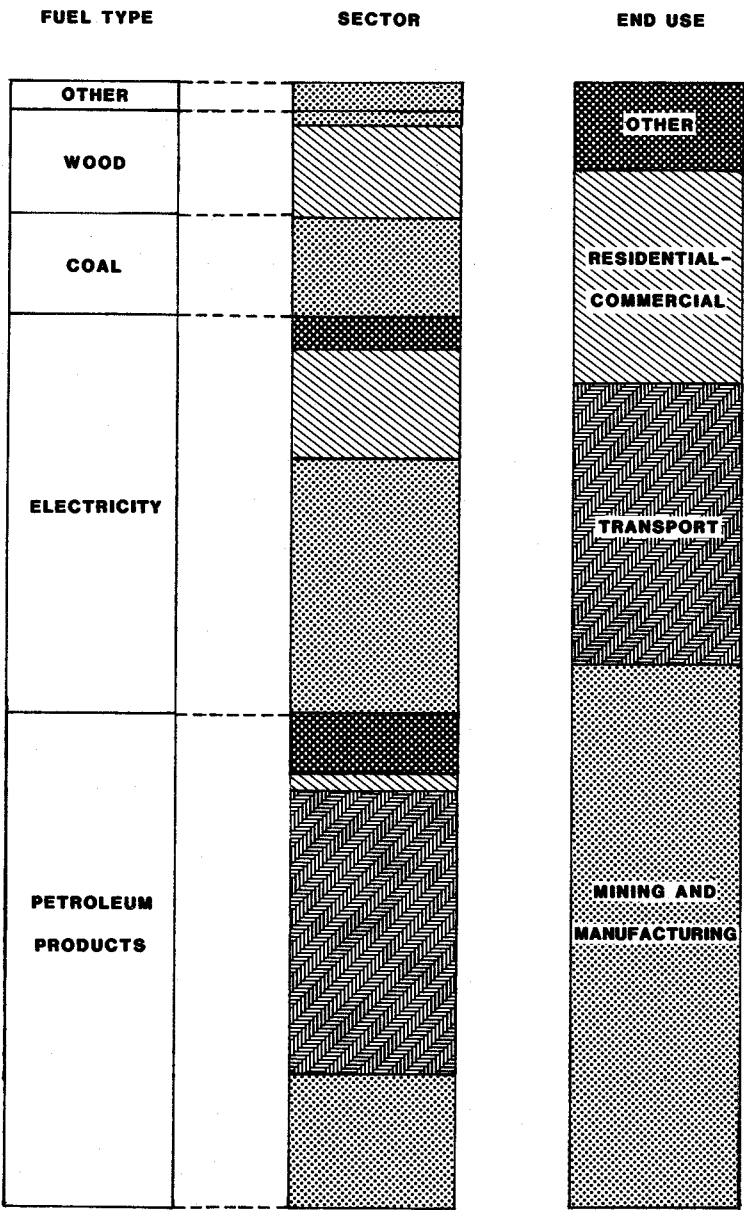
Source: Department of Resources and Energy.

Sector	1978-79	1979-80	1980-81	1981-82	1982-83
Industry (a)					
Agriculture .....	1.4	1.5	2.0	1.8	1.9
Mining .....	4.4	4.4	4.3	4.1	4.3
Manufacturing—					
Food beverages tobacco ..	2.2	2.4	2.2	2.2	2.1
Textiles etc. ....	0.5	0.5	0.4	0.4	0.4
Wood, wood products .....	1.5	1.6	1.4	1.5	1.2
Paper, paper products .....	8.8	10.4	9.3	9.9	9.8
Chemicals, petroleum, coal .....	1.8	1.9	1.7	1.6	1.4
Non-metallic minerals ....	2.9	2.5	2.6	3.2	2.8
Basic metals .....	16.6	16.9	16.3	16.2	15.5
Other manufacturing .....	0.1	0.1	0.1	0.1	0.1
Total manufacturing ...	34.5	36.3	34.2	35.2	33.3
Electricity gas and water .....	2.5	2.9	3.3	6.1	4.1
Construction .....	1.2	1.7	1.2	1.0	1.0
Wholesale/retail trade .....	1.9	1.9	1.9	2.0	1.9
Transport and storage—					
Road transport .....	17.2	17.1	17.1	17.3	16.9
Rail, water, and air transport .....	3.2	3.6	3.2	2.6	2.3
Total transport and storage .....	20.4	20.7	20.4	19.9	19.1
Communications, finance and business services .....	0.3	0.3	0.3	0.3	0.3
Public administration .....	0.3	0.3	0.3	0.3	0.3
Community services .....	0.8	0.9	0.9	0.9	0.9
Entertainment and personal services .....	0.4	0.4	0.5	0.5	0.5
Residential .....	12.1	11.7	11.6	11.8	11.8
Lubes, bitumen and solvents .....	1.3	1.2	1.1	1.1	1.2
<b>TOTAL</b> .....	<b>81.3</b>	<b>84.2</b>	<b>82.1</b>	<b>85.0</b>	<b>80.8</b>

(a) By ASIC. See *Australian Standard Industrial Classification*, Volume 1. (1201.0), Australian Bureau of Statistics, Canberra.

**ENERGY CONSUMPTION, TASMANIA 1982-83**

**SOURCE: DEPARTMENT OF RESOURCES AND ENERGY**



### Petroleum Products

All Tasmania's petroleum products are imported. In primary energy terms nearly half is used for transportation. Tasmanian industry is heavily reliant on furnace oil which is particularly vulnerable to supply disruptions and price fluctuations as it is almost entirely imported from overseas. The table below shows consumption of petroleum products in Tasmania.

Consumption of Petroleum Products, Tasmania  
Source: Department of Resources and Energy  
(million litres)

Product	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
LPG .....	n.a.	7	10	10	9	7
Aviation gasoline .....	4	4	3	3	3	2
Automotive gasoline—						
Super .....	358	370	365	367	377	368
Standard .....	56	58	56	49	41	36
Total .....	414	428	421	416	418	404
Aviation turbine fuel .....	28	35	41	35	35	35
Lighting kerosine .....	9	8	6	4	4	3
Heating oil .....	73	67	44	29	26	20
Power kerosine .....	—	—	—	—	—	—
Automotive diesel oil—						
Inland .....	168	189	210	217	206	209
Bunkers .....	1	5	3	4	3	2
Total .....	169	193	213	220	209	211
Industrial and marine diesel fuel—						
Inland .....	80	45	38	30	28	14
Bunkers .....	36	24	31	25	14	8
Total .....	116	69	70	56	42	22
Fuel oil—						
Inland .....	226	254	290	252	335	171
Bunkers .....	5	7	6	10	4	2
Total .....	231	261	296	262	339	173
Lubes .....	n.a.	n.a.	n.a.	n.a.	11	10
Bitumen .....	n.a.	n.a.	n.a.	n.a.	15	19
Other products n.e.i. ....	n.a.	n.a.	n.a.	n.a.	1	1
Total all Products (a)	1 044	1 072	1 105	1 035	1 112	908

(a) Before 1980-81 does not include lubes, bitumen and other products n.e.i.

Australia imports about 30 per cent of its crude oil requirements. Increasing dependence on imported oil has focused Federal Government attention on possible problems this might cause in terms of continuing supply and price. The Government decided to price locally produced crude oil at world parity.

Pricing local supplies of oil at the value placed on them in world markets has the advantage of encouraging:

- (i) conservation, by ensuring that energy consumers make decisions based on realistic prices;
- (ii) the substitution of petroleum products by other more readily available fuels;
- (iii) exploration and development of oil resources; and
- (iv) the development of alternative fuels.

The impact of this policy on Tasmania can be seen in the above table. Since 1978-79 there has been noticeable stabilisation or declines in the consumption of all petroleum products. Sales of automotive gasoline, the major petroleum fuel used in Tasmania, have declined by 5 per cent since 1978-79. Sales of automotive diesel oil, the other major transport fuel, increased by only one per cent in 1982-83. Reductions in the use of fuel oil via fuel substitution have been more difficult to achieve in Tasmania than in the rest of Australia due at least in part to the lack of access to natural gas and low cost coal resources.



### Hydro-Electricity

The development of hydro-electric power has been important for the economic development of Tasmania. The first plant was opened in Launceston in 1895 at Duck Reach. Work on the statewide system did not begin until 1911 when the privately owned Hydro-Electric Power and Metallurgical Co. began work at Waddamana below Great Lake. The Company was purchased by the Government in 1914 and the Hydro-Electric Department was formed. An active policy was pursued to encourage high energy using industries to establish operations in Tasmania.

This policy was pursued in the hope of overcoming Tasmania's disadvantages of a small local market and transport problems. Zinc production began in 1916, fine paper production in 1938, aluminium smelting in 1955 and ferro-manganese production in 1962.

The HED became the Hydro-Electric Commission in 1930. Since Waddamana the hydro-electric system has expanded to 1.62 million kW. As well the HEC runs a thermal plant at Bell Bay with capacity of 240 000 kW.

#### Net Consumption of Electricity, Tasmania (Petajoules) *r*

Source: Department of Resources and Energy.

Sector	1978-79	1979-80	1980-81	1981-82	1982-83
Industry (a)					
Agriculture .....	0.1	0.1	0.2	0.2	0.2
Mining .....	1.8	1.8	1.8	1.8	1.9
Manufacturing					
Food, beverages, tobacco ..	n.a.	n.a.	n.a.	n.a.	n.a.
Textiles etc. ....	0.1	0.1	0.1	0.1	0.1
Wood, wood products ....	0.3	0.4	0.4	0.4	0.4
Paper and paper products	n.a.	n.a.	n.a.	n.a.	n.a.
Chemicals, petrol, coal ...	n.a.	n.a.	n.a.	n.a.	n.a.
Non metallic minerals ....	0.4	0.4	0.4	0.4	0.3
Basic metals .....	12.7	12.6	12.3	12.7	12.1
Other manufacturing .....	n.a.	n.a.	n.a.	n.a.	n.a.
Total manufacturing ..	17.1	17.4	17.2	17.4	16.9
Electricity, gas, water .....	2.5	2.4	2.9	2.5	2.4
Construction .....	—	—	—	—	—
Wholesale/retail trade .....	1.3	1.3	1.4	1.5	1.5
Transport and Storage .....	—	—	—	—	—
Communications .....	—	—	—	0.1	0.1
Finance and business					
services .....	0.2	0.2	0.2	0.2	0.2
Public administration .....	0.2	0.2	0.2	0.2	0.2
Community Services .....	0.4	0.4	0.5	0.5	0.5
Entertainment and personal					
services .....	0.4	0.4	0.5	0.5	0.5
Residential .....	4.0	4.2	4.3	4.5	4.6
<b>TOTAL</b> .....	<b>28.0</b>	<b>28.6</b>	<b>29.2</b>	<b>29.5</b>	<b>28.8</b>

(a) By ASIC. See *Australian Standard Industrial Classification*, Volume 1 (1201.0) Australian Bureau of Statistics, Canberra.

#### Organisation of HEC

The HEC is a statutory corporation free of direct ministerial control and operates under the *Hydro-Electric Commission Act* 1944. Its responsibility is to generate, transmit, distribute and sell electrical energy. It also regulates safety standards for electrical installations and appliances. Currently it supplies 190 000 general load customers and 17 major industries. More than 5 000 people are employed. (See 1982 and previous *Year Books* for more details.)

**Hydro-Electric Commission, Tasmania, Integrated System:  
Operating Statistics (a)  
Source: Hydro-Electric Commission**

Year	Output		Installed generating capacity (b)	Peak loading	
	Units generated	Increase over previous year		Load	Increase over previous year
	<i>million kWh</i>	<i>per cent</i>	<i>kW</i>	<i>kW</i>	<i>per cent</i>
1978	7 357	6.1	1 780 400	1 159 200	10.3
1979	7 702	4.7	1 780 400	1 151 400	-0.7
1980	7 913	2.7	1 780 400	1 183 000	2.7
1981	8 003	1.1	1 780 400	1 241 100	4.9
1982	7 965	-0.5	1 860 300	1 266 100	2.0

(a) Excludes King and Flinders Islands.

(b) At 31 December.

## TASMANIAN ELECTRICITY GENERATING SYSTEM

### Introduction

Until 1971 Tasmania was unique among Australian states in that its electric power system was based almost entirely on hydro-electric installations, but in 1971 a thermal oil-fired station commenced operations at Bell Bay opening a new phase in the development of the generating system. Other Australian states rely principally on thermal plants while hydro-electric power, if available, is used only to supplement the basic supply. The Snowy Mountains Hydro-Electric Scheme, which feeds power to the Victorian and NSW grids, is not designed to cope with the base load demand in these states, its essential function being to provide the extra power necessary to meet peak loads, and also to supply water for irrigation purposes. The Tasmanian system, despite its lower installed generator capacity, produces more power than the Snowy Scheme. The total installed generator capacity of the Tasmanian electricity generating system at the end of 1982 was almost 1.9 million kW. Of this, 86 per cent (over 1.5 million kW) was contributed by an integrated hydro-electric network. The 240 000 kW oil-fired station at Bell Bay is available for use as required.

#### *Tarraleah*

This scheme was commenced in 1934 and completed in 1951. Lake St Clair was raised and Lake King William was created. Total capacity stands at 102 200 kW.

#### *Tungatinah — Lake Echo*

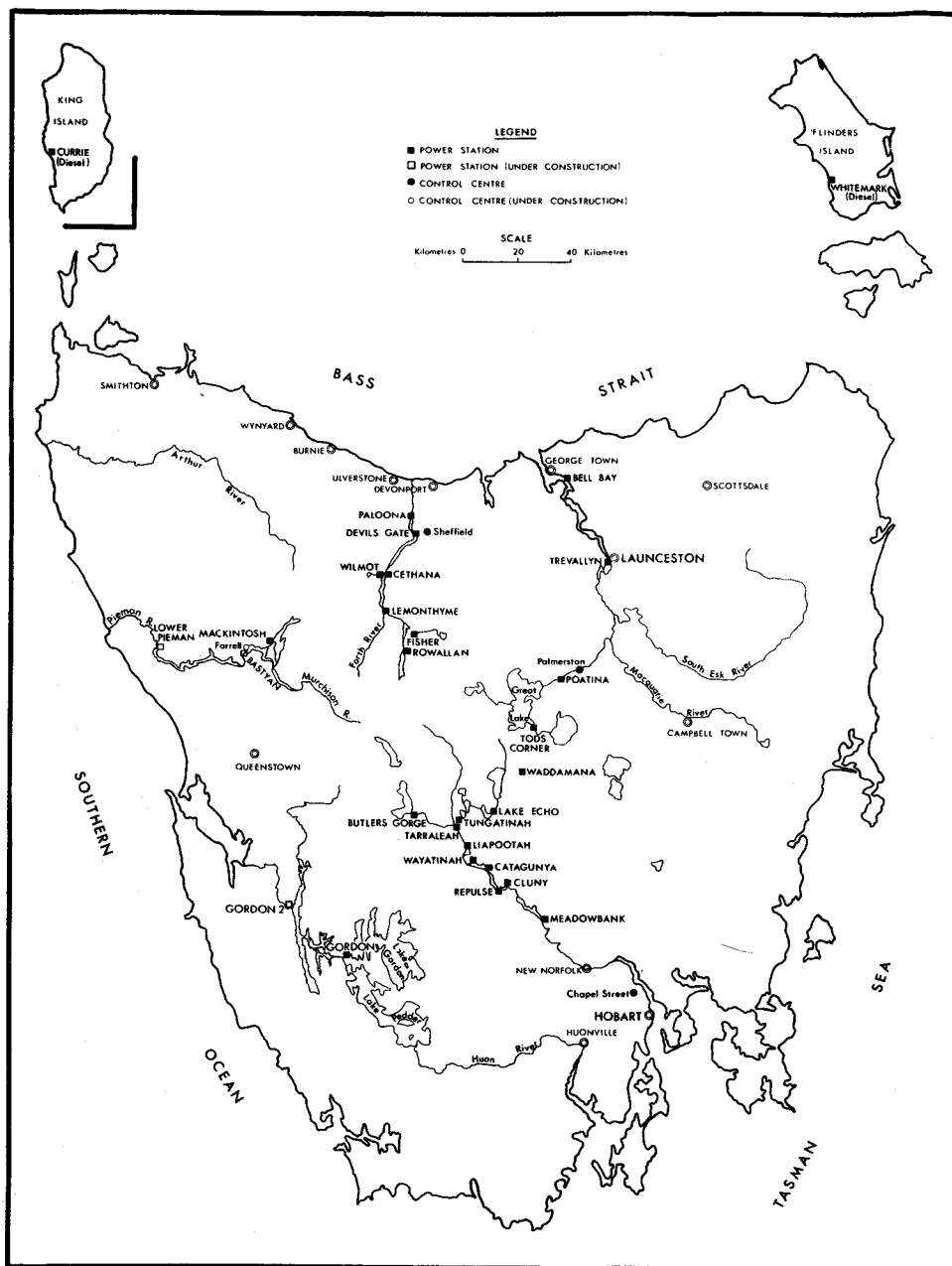
Uses the run-off from the area between Great Lake and Lake St Clair, Lake Echo being the major catchment. The scheme, completed in 1956 has a total capacity of 157 400 kW.

#### *Upper Derwent*

The Upper Derwent Development consists of three schemes — Liapootah, Wayatinah and Catagunya. The water used in these schemes has previously been used for power generation. Total capacity of these schemes is 169 950 kW.

#### *Lower Derwent*

The three stations in this development were built between 1961 and 1968 and exploit the remaining 125 m fall to sea level of the Derwent River. Total capacity of the scheme is 85 000 kW.



### *Great Lake — South Esk*

Poatina station (300 000 kW) is the largest station in the Tasmanian Hydro-Electric system. The station uses the waters of the Great Lake which have been diverted into the South Esk River. Trevallyn station fed by the South Esk brings the scheme's installed capacity to 380 000 kW.

### *Bell Bay*

Began operation in 1971 as the only non-hydro power station in the State grid. Total capacity now is 240 000 kW.

### *Mersey-Forth*

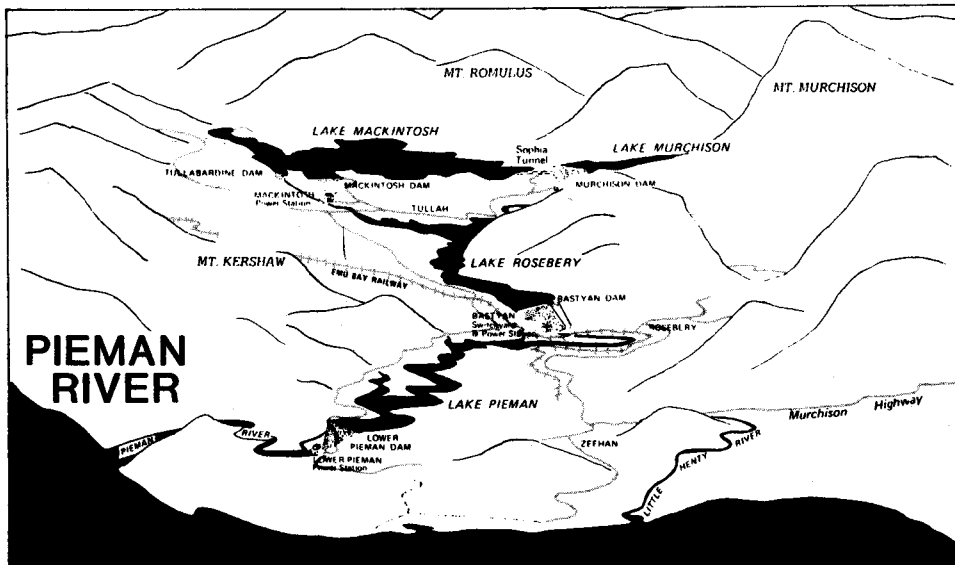
This scheme completed in 1973 exploits the flows of the Fisher, Mersey, Wilmot and Forth rivers by a development comprising seven power stations, seven large dams, three major tunnels and associated works. Total capacity is 308 250 kW.

### *Gordon River*

Uses the waters stored in two new lakes created for the scheme — Lake Pedder and Lake Gordon. These lakes form the largest fresh water storage in Australia. The Gordon power station currently has a generating capacity of 288 000 kW; progressively this will be raised to 720 000 kW by the installation of three more generators.

### *Pieman River*

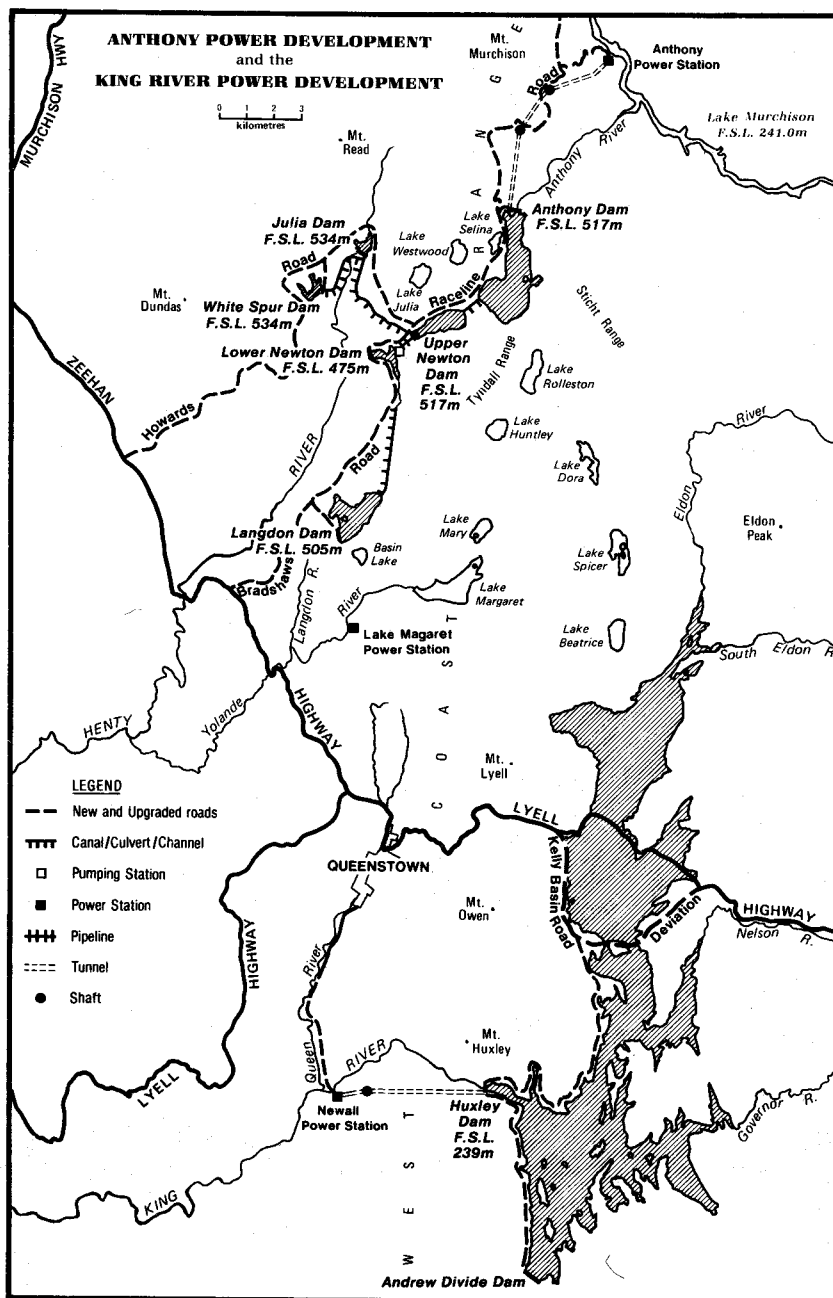
This scheme when completed will use the waters of the Pieman River system. Four lakes will be created to service three power stations. The Mackintosh power station of 79 900 kW was commissioned in 1982. When completed in 1986 the total capacity will be 418 500 kW.



(For maps of completed power schemes see the 1983 Year Book)

### King River and Anthony Power Developments

Legislation enabling construction of these two new hydro power schemes, based on western Tasmanian rivers, was approved by the State Parliament during 1983 and work began almost immediately. They will together add more than 230 000 kW to the installed capacity of the system.



## Tasmanian Electricity Generating System

<i>Stations</i>	<i>Year of first generator commission</i>	<i>Static head (metres)</i>	<i>Generator capacity (kW)</i>	<i>Energy produced (mWh)</i>
<i>Completed Stations as at 30 June 1983</i>				<i>1982-83</i>
Tarraleah	1938	299	90 000	589 862
Waddamana 'B' (a)	1944	344	48 000	5 247
Butlers Gorge	1951	56	12 200	73 377
King Island	1951	(b)	1 444	5 065
Tungatinah	1953	306	125 000	588 724
Trevallyn	1955	126	80 000	416 359
Lake Echo	1956	173	32 400	82 010
Wayatinah	1957	62	38 250	270 511
Liapootah	1960	110	83 700	471 375
Catagunya	1962	43	48 000	252 894
Poatina	1964	829	300 000	1 026 737
Tods Corner	1966	41	1 600	4 942
Meadowbank	1967	29	40 000	196 224
Cluny	1968	16	17 000	95 605
Repulse	1968	27	28 000	164 931
Rowallan	1968	49	10 450	48 142
Flinders Island	1968	(b)	400	1 027
Lemonthyme	1969	159	51 000	319 439
Devils Gate	1969	68	60 000	317 397
Wilmot	1971	251	30 600	136 305
Bell Bay (Thermal)	1971	(c)	240 000	426 876
Cethana	1971	99	85 000	443 400
Paloona	1972	31	28 000	142 325
Fisher	1973	649	43 200	241 746
Gordon (Stage 1)	1978	200	288 000	1 631 387
Mackintosh	1982	69	79 900	85 748
Bastyan	1983	63	79 900	—
<b>TOTAL</b>	..	..	1 942 044	
<i>Stations Under Construction</i>				
Pieman	1986	94	231 000	

(a) Reserve plant only.

(b) Diesel generators.

(c) Thermal oil-fired station; the second generator was installed in 1974.

## Further References

HYDRO-ELECTRIC COMMISSION *Annual Review*DEPARTMENT OF NATIONAL DEVELOPMENT AND ENERGY *Energy Demand and Supply, Australia 1960-61 to 1980-81*, A.G.P.S. Canberra 1982DEPARTMENT OF NATIONAL DEVELOPMENT AND ENERGY *Energy Forecasts for the 1980's* A.G.P.S. Canberra 1982R. P. Rutherford and M. E. Trethewey *Compensation and the Dam*, Department of Economics, University of Tasmania 1983Senate Select Committee on South West Tasmania *Report on Demand and Supply of Electricity for Tasmania and Other Matters* A.G.P.S. Canberra 1982

## CHAPTER 16

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## Chapter 16

### TRADE, DISTRIBUTION AND TOURISM

#### OVERSEAS AND INTERSTATE TRADE

##### Historical

The *Statistical Returns of Van Diemen's Land* and the *Statistics of Tasmania* provide a continuous series of total trade statistics dating from 1824 to 1909. Until the foundation of the Commonwealth in 1901, trade with other parts of Australia was recorded as originating from or being destined for 'British Colonies'; in other words, all Tasmanian sea trade was regarded as overseas. From Federation to 1909, statistics were collected and compiled by the newly formed federal Customs Department for *all* sea trade, but since 1910 only direct *overseas* trade has been recorded by Australian Customs. In an island state, it became apparent that statistics of overseas trade alone were inadequate to record economic activity and, from 1922-23, the Government Statistician collected and published details of interstate trade. The collection of these data, now undertaken independently by the State Office of the Australian Bureau of Statistics, depends primarily on documents made available by Tasmanian port authorities and Australian Customs. In brief, there is a *total* trade series (1824-1909), an *overseas* trade series (1910 to 1921-22) and a *total* trade series (1922-23 to today).

In the immediate post-war period, there was a marked expansion of commercial aviation; the freight being carried was a component of interstate trade and steps were taken to record it, the first published figures appearing for 1949-50. Thus, the total trade of Tasmania is now recorded in three categories: overseas, by sea and air; interstate by sea; and interstate by air.

##### Definition of 'Overseas' and 'Interstate'

Statistics on Tasmania's overseas trade include details of goods landed directly from overseas ports and goods of Tasmanian origin exported directly or transhipped through other Australian states to overseas countries. Prior to 1 July 1978 overseas export statistics comprised details of goods exported overseas for which the export documentation was lodged with the *Bureau of Customs* in Tasmania. Accordingly, due to this change in the method of recording overseas exports, figures for 1978-79 and following years are not directly comparable with those for previous years.

Statistics of interstate trade include details of goods landed in or shipped from Australian states. In addition, details of goods imported from overseas through other Australian states are included provided that the overseas import documentation has been lodged with customs in another Australian state. They do not include details of exports transhipped through Australian states.

By way of example, a new Japanese car transhipped in Melbourne and discharged in Tasmania is classified as an item of interstate trade. Victoria, not Japan, is classified as the place of origin, provided that the overseas import document has been lodged with Customs in Victoria. Import and export details of motor cars and commercial vehicles include tourist vehicles entering and leaving the State.

##### Source of Trade Statistics

*Overseas* trade statistics are compiled from documents obtained under the Federal *Customs Act* 1901 and supplied to the Australian Bureau of Statistics by the Australian



Customs. *Interstate sea* trade statistics are compiled from documents required under the authority of the *Marine Act* 1976 and made available to the Tasmanian Office of the ABS by the various port authorities. Statistics of *interstate air* trade are compiled from returns furnished direct to the Tasmanian Office of the ABS by all those who use this medium for the transportation of goods in commercial or industrial operations.

### Values

The cost of importing goods into any country will theoretically contain four elements: (i) the 'original' price at door of factory, warehouse, etc.; (ii) the cost of delivering goods to the ship 'free on board'; (iii) sea freight and associated charges between ports; and (iv) cost of delivery from port to buyer.

Trade statistics base values on the first two elements but exclude the third and fourth as set out in the following definitions:

*Overseas Exports:* Goods sold to overseas buyers before export are valued at the 'free-on-board' (f.o.b.) port of shipment equivalent of the actual price paid to the exporter. Goods shipped on consignment are valued at the f.o.b. port of shipment equivalent of the current price offering for similar goods of Tasmanian origin in the principal markets of the country to which they are despatched for sale.

*Overseas Imports:* The recorded value for overseas imports is the 'value for duty' as required for customs purposes. On 1 July 1976 Australia adopted the internationally recognised Brussels Definition of Value on a f.o.b. basis (i.e. charges and expenses involved in delivering the goods from the place of exportation to the place of introduction in Tasmania, are excluded). The value for duty is based on the normal price (i.e. the price the goods would fetch at the time when duty becomes payable on a sale in the open market between a buyer and a seller independent of each other). In practice, the basis for valuation is generally taken to be the invoice price subject to certain safeguards and adjustments where necessary. This new basis of valuation differs from that used prior to July 1976 which, broadly, was based on the higher of actual selling price or current domestic value (in the country of export) plus charges involved in placing the goods free-on-board the vessel at the port of export. Because of the change in the basis of valuation the recorded overseas import figures from 1 July 1976 are not directly comparable with those for previous years. It is estimated that if the previous basis of valuation had continued, the value of total overseas imports would have been about 2 per cent higher than the recorded values on the new basis.

*Interstate Imports and Exports:* These are valued at the f.o.b. port of shipment equivalent of the actual price at which the goods were sold.

### Tasmanian Ports

Although there are seven port authorities (usually called marine boards) in Tasmania, overseas trade is restricted to the ports of Hobart, Launceston, Burnie, Devonport and Stanley. (Exports of iron ore from Port Latta are credited to Stanley and exports of woodchips from Spring Bay are credited to Hobart.) The names of ports in subsequent tables refer to the cities or towns in which the controlling port authorities are located. Thus 'Hobart' includes Port Huon, Spring Bay, Howden and Strahan; 'Launceston' includes Bell Bay, Inspection Head and Long Reach; 'Stanley' includes Port Latta; 'Currie' includes Naracoopa and Grassy; and 'Lady Barron' includes Whitemark.

This chapter deals only with the imports and exports passing through these ports. For a description of the major ports and for the financial operations of the port authorities, see Chapter 17.

### Total Trade of Tasmania

The following table shows Tasmanian total trade and its components in recent years. It will be observed that interstate trade is the major element both in imports and exports (but imports include some goods transhipped through other Australian ports—see

definitions above). See the Statistical Summary at the end of this book for a detailed historical series.

**Total Trade, Tasmania**  
(*\$'000*)

Year	Imports				Exports (a)			
	Overseas	Interstate		Total	Overseas	Interstate		Total
	By sea	By sea(b)	Air	imports(b)	By sea and air	By sea	By air	exports
1977-78 .....	115 778	594 793	39 388	749 960	381 942	606 896	38 206	1 027 044
1978-79 .....	140 652	621 598	74 578	836 829	513 286	627 186	39 727	1 180 199
1979-80 .....	179 780	935 584	53 481	1 168 845	646 827	772 531	32 141	1 451 499
1980-81 .....	172 456	973 685	60 922	1 207 063	658 013	837 042	45 171	1 540 226
1981-82 .....	166 032	1 031 330	61 187	1 258 548	647 617	879 421	47 525	1 574 562
1982-83 .....	179 814	n.y.a.	n.y.a.	n.y.a.	773 044	n.y.a.	n.y.a.	n.y.a.

(a) From 1978-79, data for overseas exports are not directly comparable with data for earlier years.

(b) Data for 1979-80 onwards are not directly comparable with data for earlier years.

The next table shows the balance of trade (excess of exports over imports):

**Balance of Trade (Sea and Air), Tasmania (a)**

Year	Balance of trade (excess of exports)		Year	Balance of trade (excess of exports)	
	Total	Per head of		Total	Per head of
	(\$'000)	mean population (\$)		(\$'000)	mean population (\$)
1976-77 .....	169 905	411	1979-80 .....	282 654	669
1977-78 .....	277 084	665	1980-81 .....	333 163	783
1978-79 .....	343 370	819	1981-82 .....	316 014	737

(a) Data for 1978-79 onwards are not directly comparable with data for earlier years.

The following table compares Australia's total overseas imports and exports with the corresponding values for Tasmania; by using a per capita comparison, certain conclusions can be drawn about the relative importance of Tasmania's overseas exports.

**Value of Overseas Trade: Tasmania and Australia**

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Imports</i>					
Australia—Total .... \$'000	13 751 514	16 217 527	18 964 604	23 004 685	21 806 179
Per head ..... \$	952.7	1 110.9	1 280.7	1 528.4	1 426.9
Tasmania—Total .... \$'000	140 652	179 780	172 456	166 032	179 814
Per head ..... \$	336.9	426.9	405.5	387.5	417.5
<i>Exports</i>					
Australia—Total .... \$'000	14 240 865	18 870 917	19 176 955	19 575 206	22 061 623
Per head ..... \$	986.6	1 292.6	1 295.0	1 301.0	1 443.6
Tasmania—Total ..... \$	513 286	646 827	658 013	647 617	773 044
Per head ..... \$	1 229.4	1 536.0	1 547.2	1 511.4	1 794.9

The relatively low value of overseas imports per head of Tasmania's mean population is due largely to the transshipment of goods imported from overseas through other Australian ports. However, Tasmania has a healthy balance of total trade. As shown in the previous table, the balance of trade (excess of exports over imports) in 1981-82 was \$737 per head of mean population. The export comparisons *per head* of Australian and

Tasmanian mean populations suggest that the State plays an important role as an earner of export income for Australia.

### Tasmanian Exports

The following table shows the value of principal commodities exported (interstate and overseas) from Tasmania by sea and air:

Exports of Principal Commodities by Sea and Air: Values, Tasmania  
(\$'000)

Commodity	1979-80	1980-81	1981-82
Butter (including butter oil) .....	4 343	2 703	867
Cheese .....	r 17 127	22 414	25 827
Fish— Abalone .....	10 537	18 253	21 370
Rock Lobster .....	4 815	5 595	7 577
Other .....	4 041	1 384	1 501
Fruit— Apples (fresh) .....	13 506	12 004	19 147
Juices .....	1 760	1 697	1 550
Other .....	2 978	3 630	3 673
Hides and skins (excluding fur skins) .....	11 374	6 551	8 256
Hops .....	2 399	3 962	3 965
Live animals— Cattle .....	7 227	8 585	15 622
Sheep .....	8 866	5 988	5 507
Machinery .....	8 946	10 745	9 989
Meat— Beef and veal .....	34 651	27 555	28 194
Lamb and mutton .....	5 345	6 903	7 550
Other .....	1 674	1 432	1 800
Metals refined—Cadmium .....	3 156	2 780	1 932
Zinc .....	127 264	135 276	162 700
Ores and concentrates— Copper .....	35 190	40 628	23 811
Iron .....	46 626	46 728	56 191
Lead .....	52 969	26 114	37 959
Tin .....	78 918	70 189	66 530
Tungsten .....	29 775	37 568	26 915
Tallow .....	3 974	3 119	4 127
Textile yarn, fabrics and made-up articles .....	37 184	45 047	46 095
Timber (Dressed and undressed) .....	88 238	85 254	82 206
Vegetables— Fresh .....	2 593	4 970	5 224
Preserved .....	51 323	62 637	64 278
Wool, greasy .....	36 630	48 422	48 000
Commodities not available for publication (a) .....	574 691	638 838	629 761
All other merchandise .....	r 83 519	r 78 096	81 225
<b>Total merchandise .....</b>	<b>1 391 639</b>	<b>1 465 067</b>	<b>1 499 349</b>
<b>Non-merchandise—</b>			
Motor vehicles (b) .....	53 541	65 041	72 889
Other .....	6 319	10 118	1 456
Re-exports .....	n.a.	n.a.	332
<b>Total .....</b>	<b>1 451 499</b>	<b>1 540 226</b>	<b>1 574 026</b>

(a) Commodities comprising this item are: aluminium, alumina, beadings and mouldings, paper, hard-board, cement, ferro-manganese, silicon-manganese, confectionery, cocoa and chocolate, food beverages, paper pulp, metal scrap, calcium carbide, titanium oxides, plywood, rutile, zirconium, particle board, asbestos-cement articles, ferro-silicon and woodchips.

(b) Mainly tourist and other motor vehicles exported as personal effects.

The next table shows the quantities of the principal commodities exported and has been compiled, as far as possible, to match the preceding table of values:

## Exports of Principal Commodities by Sea and Air: Quantities, Tasmania

Commodity (a)	Unit of quantity	1979-80	1980-81	1981-82
Butter (including butter oil) .....	t	2 871	1 510	413
Cheese .....	t	12 188	13 302	13 782
Fish—Abalone .....	t	1 351	1 812	2 006
Rock lobster .....	t	612	683	922
Other .....	t	n.a.	486	367
Fruit—Apples (fresh) .....	t	44 538	38 558	49 573
Juices and syrups .....	'000 L	1 024	1 164	757
Other .....	t	5 731	6 497	..
Hides and skins (excluding fur skins) .....	t	6 853	6 561	8 062
Hops .....	t	957	1 316	1 264
Live animals—Cattle .....	No.	21 484	26 291	53 464
Sheep .....	No.	349 053	234 542	270 078
Meat—Beef and veal .....	t	15 662	13 367	14 989
Lamb and mutton .....	t	4 370	5 262	6 373
Other .....	t	1 072	1 087	1 498
Metals, refined—Cadmium .....	t	649	662	662
Zinc .....	t	185 327	194 115	199 774
Ores and concentrates—Copper .....	t	71 609	78 444	63 937
Iron .....	'000 t	1 960	2 101	1 935
Lead .....	t	42 990	27 534	61 682
Tin .....	t	13 874	14 109	12 922
Tungsten .....	t	3 253	3 940	3 498
Tallow .....	t	7 841	7 643	11 491
Timber .....	M <sup>3</sup>	291 453	265 488	255 366
Vegetables—Fresh .....	t	13 083	23 615	20 566
Preserved .....	t	99 846	108 613	107 934
Wool, greasy .....	t	13 213	16 356	15 698
Non-merchandise—				
Motor Vehicles (b) .....		18 426	21 537	21 954

(a) Principal commodities not available for publication comprise: aluminium, alumina, hardboard, cement, ferro-manganese, silicon-manganese, confectionery, cocoa and chocolate, food beverages, paper-pulp, metal scrap, calcium carbide, titanium oxides, plywood, rutil, zirconium, particle board, asbestos-cement articles, ferro-silicon and woodchips.

(b) Mainly tourist and other motor vehicles exported as personal effects.

The following table shows total value details of Tasmanian exports to overseas countries. The principal countries of destination for exports (value in \$1m) were: Japan 274.4; Malaysia 104.0; United States of America 89.4; Indonesia 50.3; and China (excluding Taiwan province) 36.4.

Exports to Overseas Countries, Tasmania  
(\$'000)

Country of Origin or Destination	1980-81	1981-82	1982-83
Association of South East Asian Nations (ASEAN)—			
Indonesia .....	36 938	49 260	50 318
Malaysia .....	66 541	73 347	103 964
Philippines .....	6 084	5 396	8 411
Singapore, Republic of .....	18 314	9 820	13 787
Thailand .....	16 964	17 702	19 819
Total ASEAN .....	144 841	155 524	196 300
European Economic Community (EEC)—			
Belgium—Luxembourg .....	16 179	12 773	4 178
Denmark .....	327	190	378
France .....	8 604	6 774	10 456

continued next page

**Exports to Overseas Countries, Tasmania**  
**(\$'000)—continued**

<i>Country of Origin or Destination</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Germany, Federal Republic of .....	28 184	22 244	15 493
Greece .....	1 084	1 881	2 540
Ireland .....	47	189	287
Italy .....	5 630	6 093	6 496
Netherlands .....	4 779	6 062	6 894
United Kingdom .....	16 413	21 803	9 113
<b>Total EEC .....</b>	<b>81 247</b>	<b>78 008</b>	<b>55 836</b>
<b>Other Major Trading Partners—</b>			
Canada .....	1 079	1 394	2 498
China—excluding Taiwan province ..	2 085	11 769	36 395
Taiwan province .....	16 500	15 834	16 706
Hong Kong .....	24 147	25 258	20 302
India .....	9 015	8 242	6 436
Iran .....	1 919	—	4 088
Japan .....	255 572	221 458	274 446
Korea, Republic of .....	5 893	3 764	13 968
New Zealand .....	11 330	11 370	10 804
Norway .....	1 524	2 742	1 301
Papua New Guinea .....	3 108	2 703	1 955
Poland .....	4 490	2 979	1 517
Qatar .....	1 925	185	3 493
South Africa .....	1 775	1 811	653
Sweden .....	6 099	4 793	1 635
United States of America .....	66 139	72 737	89 423
USSR .....	2 962	7 831	10 105
Other Countries .....	16 364	18 884	22 216
Re-exports .....	—	332	2 966
<b>Total overseas exports .....</b>	<b>658 013</b>	<b>647 617</b>	<b>773 044</b>

Value details for commodities exported to principal overseas countries are shown in the next table:

**Value of Exports to Principal Overseas Countries, Tasmania**  
**(\$'000)**

<i>Commodity</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>Japan</i>			
Abalone .....	9 383	11 851	6 477
Cheese .....	1 386	972	1 969
Ferro-alloys .....	908	2 281	3 921
Meat—Beef and veal .....	8 664	7 032	6 762
Lamb and mutton .....	2 995	3 941	4 079
Other .....	412	410	285
Milk, dried .....	809	1 076	3 021
Ores and concentrates—			
Copper .....	33 230	21 640	81 633
Lead .....	—	—	5 248
Iron .....	44 460	56 183	24 566
Tungsten .....	3 737	2 313	795
Wool, greasy .....	7 528	8 454	5 100
Restricted items (a) .....	137 440	102 188	127 241
Other .....	4 622	3 119	3 349
<b>Total .....</b>	<b>255 572</b>	<b>221 458</b>	<b>274 446</b>

*continued next page*

Value of Exports to Principal Overseas Countries, Tasmania  
(\$'000)—continued

Commodity	1980-81	1981-82	1982-83
<i>Malaysia</i>			
Apples, fresh or chilled .....	435	539	524
Meat, fresh or frozen .....	547	434	360
Paper .....	3 195	2 680	1 713
Tin concentrates .....	56 354	61 462	92 003
Zinc refined .....	3 148	3 461	3 641
Restricted items (a) .....	1 964	2 618	3 705
Other .....	898	2 154	2 017
Total .....	66 541	73 347	103 964
<i>United States of America</i>			
Abalone .....	1 826	2 416	2 104
Beef and veal .....	14 447	15 749	24 318
Cadmium .....	972	511	567
Casein .....	1 310	759	1 156
Cheese .....	3 610	5 088	3 647
Ferro-alloys .....	6 775	2 255	3 235
Lead concentrates .....	8 796	18 963	19 617
Machinery .....	2 052	1 363	906
Rock-lobster .....	1 425	2 203	3 209
Wool, greasy .....	1 277	696	2 116
Zinc .....	15 775	15 733	19 489
Restricted items (a) .....	5 528	2 129	3 292
Other .....	2 346	4 873	5 765
Total .....	66 139	72 737	89 423
<i>Indonesia</i>			
Ferro-alloys .....	2 276	1 614	2 557
Food beverages .....	1 546	1 441	1 502
Zinc .....	26 872	41 693	39 030
Restricted items (a) .....	4 935	2 935	5 301
Other .....	1 310	1 578	1 927
Total .....	36 938	49 260	50 318
<i>China—Excluding Taiwan Province</i>			
Tallow .....	1 723	202	783
Zinc .....	—	6 429	22 424
Restricted items (a) .....	—	5 118	13 187
Other .....	362	20	—
Total .....	2 085	11 769	36 395

(a) Comprises the value of item for which details are not available for separate publication.

Quantity details for commodities exported to principal overseas countries are shown in the next table:

**Quantity of Exports to Principal Overseas Countries, Tasmania**

<i>Commodity</i>	<i>Unit of</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>Japan</i>				
Abalone .....	t	984	1 242	683
Cheese .....	t	874	533	1 039
Ferro-alloys .....	t	2 000	5 200	8 312
Hides and skins .....	t	795	789	532
Meat—Beef and veal .....	t	3 701	3 397	2 504
Mutton .....	t	2 494	3 396	4 383
Other .....	t	228	170	135
Milk, dried .....	t	625	775	2 101
Onions, fresh .....	t	3 335	1 702	871
Ores and concentrates—				
Copper .....	t	63 337	59 871	61 301
Iron .....	'000 t	2 014	1 934	2 209
Lead .....	t	—	—	21 025
Tungsten .....	t	396	289	120
Wool, greasy .....	t	2 550	2 847	1 686
<i>Malaysia</i>				
Apples, fresh or chilled ....	t	971	1 400	946
Meat, fresh or frozen .....	t	333	291	300
Paper .....	t	4 810	4 397	2 582
Tin concentrates .....	t	10 260	11 170	14 590
Zinc refined .....	t	4 646	3 964	4 301
<i>United States of America</i>				
Abalone .....	t	171	195	185
Beef and veal .....	t	7 547	8 800	12 108
Cadmium .....	t	249	180	281
Casein .....	t	388	255	369
Cheese .....	t	2 026	2 782	1 854
Ferro-alloys .....	t	22 851	6 412	10 300
Lead concentrates .....	t	6 795	25 374	24 199
Rock-lobster .....	t	114	168	201
Wool, greasy .....	t	384	197	514
Zinc .....	t	21 576	19 708	22 624
<i>Indonesia</i>				
Ferro-alloys .....	t	6 998	4 965	10 500
Food beverages .....	t	1 074	997	807
Zinc .....	t	42 522	53 735	49 884
<i>China — Excluding Taiwan Province</i>				
Tallow .....	t	4 078	542	1 887
Zinc .....	t	—	8 423	29 302

(a) Trawlers and other fishing vessels exported after temporary operations in Tasmanian waters.

**Tasmanian Imports**

The next table shows the value of the selected commodities (interstate and overseas) imported into Tasmania by sea and air for a three-year period:

Value of Imports of Selected Commodities by Sea and Air, Tasmania (a)  
(\$'000)

Commodity	1979-80	1980-81	1981-82
Ores and concentrates and metal scrap .....	88 209	77 885	109 728
Coal, coke and briquettes .....	7 420	6 852	6 665
Motor spirit .....	68 460	82 815	94 782
Auto distillate .....	44 229	58 905	56 061
Furnace fuel .....	36 721	32 285	48 071
Iron and steel .....	22 877	22 473	30 517
New passenger motor vehicles .....	61 145	61 129	63 694
New commercial vehicles .....	32 279	30 228	23 951
All other merchandise commodities .....	752 754	769 983	754 682
Total merchandise commodities .....	1 114 093	1 142 555	1 188 151
Non-merchandise commodities—			
Motor vehicles (passengers' personal effects) .....	53 581	63 272	69 006
Other non-merchandise .....	1 170	1 236	1 391
Total imports .....	1 168 845	1 207 063	1 258 548

(a) Only a restricted range of items has been included due to coverage problems relating to interstate imports by sea.

The table that follows shows the quantities of the selected commodities imported and has been compiled, as far as is practicable, to match the preceding table of values.

Quantity of Imports of Selected Commodities by Sea and Air, Tasmania (a)

Commodity	Unit of Quantity	1979-80	1980-81	1981-82
Ores and concentrates and metal scrap .....	t	889 284	745 747	736 096
Coal, coke and briquettes .....	t	133 787	109 907	96 262
Motor spirit .....	'000 L	368 177	368 976	373 131
Auto distillate .....	'000 L	199 963	222 198	186 251
Furnace fuel .....	'000 L	260 854	194 369	255 695
New passenger motor vehicles .....	no.	13 779	13 021	12 591
New commercial vehicles .....	no.	3 142	4 033	3 430
Non-merchandise commodities—				
Motor vehicles (passengers' personal effects) .....	no.	18 525	20 932	20 946

(a) Only a restricted range of items has been included due to coverage problems relating to interstate imports by sea.

The following table shows value details of Tasmanian imports from selected overseas countries. It should be noted that some goods are received from overseas countries by transshipment through other Australian States; no data are available on such transactions.

Imports from Overseas Countries, Tasmania  
(\$'000)

Country of Origin or Destination	1980-81	1981-82	1982-83
Association of South East Asian Nations (ASEAN)—			
Indonesia .....	229	286	158
Malaysia .....	4 121	2 742	2 889
Philippines .....	246	394	448
Singapore, Republic of .....	1 070	1 630	19 978
Thailand .....	513	1 625	1 396
Total ASEAN .....	6 180	6 678	24 870

continued next page



**Imports from Overseas Countries, Tasmania**  
(S'000)—*continued*

<i>Country of Origin or Destination</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<b>European Economic Community</b>			
(EEC)—			
Belgium—Luxembourg .....	373	419	456
Denmark .....	1 004	414	232
France .....	1 599	2 714	3 720
Germany, Federal Republic of .....	5 694	3 570	4 563
Greece .....	36	—	3
Ireland .....	112	63	10
Italy .....	2 597	1 655	1 490
Netherlands .....	6 529	4 700	6 862
United Kingdom .....	15 513	12 477	11 633
<b>Total EEC .....</b>	<b>33 456</b>	<b>26 013</b>	<b>28 969</b>
<b>Other Major Trading Partners—</b>			
Canada .....	19 020	16 749	13 111
China—excluding Taiwan province ..	1 316	1 030	882
Taiwan province .....	8 502	11 068	10 805
Hong Kong .....	1 885	1 541	1 074
India .....	264	228	108
Iran .....	—	—	—
Japan .....	33 891	28 536	24 229
Korea, Republic of .....	2 641	3 652	3 334
Nauru .....	3 302	4 058	2 671
New Zealand .....	16 565	18 001	17 620
Norway .....	2 604	3 008	1 397
Papua New Guinea .....	—	—	—
Poland .....	349	46	54
Qatar .....	—	—	—
South Africa .....	1 247	2 699	3 029
Sweden .....	4 004	2 935	2 118
United States of America .....	28 087	28 335	24 251
USSR .....	32	11	14
Other Countries .....	8 931	11 342	21 061
Australia (re-imported) .....	179	102	216
<b>Total overseas imports .....</b>	<b>172 456</b>	<b>166 032</b>	<b>179 814</b>

The principal countries of origin, together with values (in \$m) for overseas imports shipped direct to Tasmania in 1982-83 were: United States of America 24.3; Japan 24.2; Singapore 20.0; New Zealand 17.6; and Canada 13.1. Value figures for the main commodities are shown in the next table:

**Value of Imports from Principal Overseas Countries, Tasmania**  
(S'000)

<i>Commodity</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>United States of America</i>			
Chemicals .....	330	394	1 264
Clays .....	1 466	864	1 506
Coke of coal .....	552	189	—
Machinery .....	8 978	5 793	3 981
Petroleum coke .....	7 645	8 465	6 865
Fuel oil .....	—	4 438	2 275
Textiles .....	1 345	1 736	994
Transport equipment .....	1 138	229	2 275
Wood pulp .....	2 887	1 808	1 375
Other (a) .....	3 746	4 419	3 716
<b>Total .....</b>	<b>28 087</b>	<b>28 335</b>	<b>24 251</b>

*continued next page*

**Value of Imports from Principal Overseas Countries, Tasmania**  
 (\$'000)—*continued*

<i>Commodity</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>United States of America</i>			
<i>Japan</i>			
Chemicals .....	3 175	2 492	3 395
Commercial vehicles .....	9 042	8 155	8 050
Machinery .....	10 498	6 612	3 826
Motor cycles .....	1 538	1 117	856
Passenger motor vehicles .....	6 565	6 722	5 135
Textiles .....	404	840	879
Other (a) .....	2 669	2 598	2 088
<b>Total .....</b>	<b>33 891</b>	<b>28 536</b>	<b>24 229</b>
<i>Singapore</i>			
Automotive gasoline .....	—	—	5 203
Cork and wood manufactures .....	48	96	483
Fuel oil .....	—	—	7 470
Jewellery .....	174	405	294
Metal manufactures .....	1	542	—
Textiles .....	352	90	156
Other (a) .....	496	496	6 372
<b>Total .....</b>	<b>1 070</b>	<b>1 630</b>	<b>19 978</b>
<i>New Zealand</i>			
Food and beverages .....	r 421	660	1 060
Machinery .....	1 089	553	575
Metal manufactures .....	r 629	1 181	1 870
Paper and paper board .....	1 181	648	968
Textiles .....	261	441	338
Wood pulp .....	10 640	11 951	9 740
Wool .....	725	1 331	1 113
Other (a) .....	r 1 619	1 236	1 957
<b>Total .....</b>	<b>16 565</b>	<b>18 001</b>	<b>17 620</b>
<i>Canada</i>			
Asbestos .....	374	185	243
Chemicals .....	2 141	2 222	1 392
Machinery .....	1 163	2 263	480
Textiles .....	626	243	311
Wood pulp .....	14 166	10 074	10 417
Other (a) .....	550	1 762	268
<b>Total .....</b>	<b>19 020</b>	<b>16 749</b>	<b>13 111</b>

(a) Includes value of items not available for separate publication.

Quantity details for the main commodities (where available) are shown in the following table:

## Quantity of Imports from Principal Overseas Countries, Tasmania

Commodity	Unit of Quantity	1980-81	1981-82	1982-83
<i>United States of America</i>				
Clays .....	t	37 428	15 208	28 757
Coke of coal .....	t	2 519	809	—
Fuel oil .....	'000L	—	29 676	16 228
Petroleum coke .....	t	52 233	49 562	43 099
Wood pulp .....	t	7 161	4 803	4 180
<i>Japan</i>				
Commercial vehicles .....	no.	2 488	2 083	1 844
Motor cycles .....	no.	2 264	1 523	1 002
Passenger motor vehicles .....	no.	2 215	2 136	1 479
<i>Singapore</i>				
Automotive gasoline .....	'000L	—	—	21 313
Fuel oil .....	'000L	—	—	42 192
<i>New Zealand</i>				
Wood pulp .....	t	28 286	32 007	25 121
Wool .....	t	226	465	422
<i>Canada</i>				
Asbestos .....	t	537	262	315
Wood pulp .....	t	35 440	24 379	26 359

(a) Trawlers and other fishing vessels imported for temporary operations in Tasmanian waters.

## OVERSEAS SHIPPING AT TASMANIAN PORTS

*System of Record*

From 1 July 1978 shipping statistics are compiled for overseas shipping only. Statistics relating to overseas and interstate shipping at Tasmanian ports for 1977-78 and earlier years are included in the 1981 issue of the *Year Book*.

Overseas shipping statistics are compiled from returns submitted by shipping companies or their representatives to the ABS via Customs Houses at each port in Tasmania. A return is required for each vessel calling at or departing from Australian ports for the purpose of carrying cargo from or to overseas ports. A return must be submitted even if cargo is not discharged or loaded.

Details are not included for the following:

- (i) naval vessels;
- (ii) yachts and other craft used for pleasure;
- (iii) foreign fishing vessels visiting Australian ports for purposes other than the loading or discharge of cargo;
- (iv) geophysical, oceanographic research and seismic survey vessels;
- (v) off shore oil drilling rigs and related vessels;
- (vi) Australian registered vessels operating from Australian ports;
- (vii) all vessels of 200 registered net tonnes and under.

*Unit of quantity*

*Revenue tonne* is the unit of quantity predominantly used in the shipping industry. It is the basis on which freight is charged and is obtained by adding mass (tonnes) and volume (cubic metres) units. Because revenue tonnes are derived by adding mass and volume units, they should be used with care.

## Overseas Cargo Discharged at Tasmanian Ports

Port	1980-81			1981-82		
	No. of vessels (a)	Vessel calls (b)	Revenue tonnes	No. of vessels (a)	Vessel calls (b)	Revenue tonnes
Burnie	10	81	67 263	15	95	71 657
Devonport	9	26	6 169	9	19	6 556
Hobart	48	137	139 214	53	144	183 687
Launceston	69	119	73 668	62	112	95 743
Port Latta	27	27	12 458	24	25	—
Spring Bay	3	3	—	4	4	—
Stanley	—	1	10 535	2	2	17 334
Total	166	394	309 307	169	401	374 977

(a) (b) See footnotes to next table.

## Overseas Cargo Loaded at Tasmanian Ports

Port	1980-81			1981-82		
	No. of vessels (a)	Vessel calls (b)	Revenue tonnes	No. of vessels (a)	Vessel calls (b)	Revenue tonnes
Burnie	7	84	233 633	13	96	282 871
Devonport	4	29	33 860	5	19	23 786
Hobart	57	148	815 525	61	153	672 818
Launceston	71	119	1 864 270	57	113	1 635 997
Port Latta	25	25	2 093 144	25	25	1 948 657
Spring Bay	4	4	133 816	4	4	94 843
Stanley	—	1	—	—	2	—
Total	168	410	5 174 248	165	412	4 658 972

(a) 'No. of vessels' refers to the number of direct overseas arrivals to, or departures from, Tasmania.

(b) 'Vessel calls' refers to the number of port visits that an overseas vessel makes in Tasmania.

## RETAIL TRADE IN TASMANIA

## Establishments

The following table provides structural details of the retail trade sector in the state. The number of retail establishments and employment are shown classified according to categories of retail establishments from figures derived from censuses of retail and selected service establishments conducted in 1974 and 1980.

Retail and Selected Service Establishments and Persons Employed by Industry Class  
Tasmania, June 1974 and 1980

Description	ASIC code (a)	1974		1980	
		Establishments	Persons employed (b)	Establishments	Persons employed (b)
		no.	no.	no.	no.
Food stores .....	488	1 441	6 114	1 374	6 954
Motor vehicle dealers, petrol and tyre retailers .....	486	955	5 683	1 065	5 468
Clothing, fabrics and furniture stores .....	484	529	2 703	703	2 855
Household appliance and hardware stores .....	485	291	1 354	335	1 216
Department and general stores .....	481	80	2 766	40	2 530
Other retailers .....	489	571	2 154	751	2 541
Total retail establishments .....		3 867	20 774	4 268	21 564

continued next page

**Retail and Selected Service Establishments and Persons Employed by Industry Class  
Tasmania, June 1974 and 1980—continued**

Description	ASIC code (a)	1974		1980	
		Establish- ments	Persons employed (b)	Establish- ments	Persons employed (b)
Cafes and restaurants .....	9 231	130	1 171	199	1 572
Licensed clubs .....	9 241-43	163	673	r 185	r 770
Hairdressers and beauty salons .....	935	256	773	r 271	r 840
Laundries and dry cleaners .....	9 340	n.a.	n.a.	r 59	r 349
Motion picture theatres .....	9 133	n.a.	n.a.	r 13	r 150

(a) Australian Standard Industrial Classification (1978 Edition).

(b) Includes working proprietors.

As shown by the following table retail establishments are evenly distributed throughout the principal areas of the state.

**Census of Retail Establishments and Selected Service Establishments, Tasmania, 1979-80  
Retail Establishments (a)—Selected Items by Statistical Division**

Statistical division or sub-division	Establishments at 30 June	Employment at 30 June (persons) (b)	Wages and salaries (c)	Turnover
	no.	no.	\$'m	\$'m
Hobart .....	1 595	9 120	54.9	525.9
Southern .....	272	716	1.8	29.4
Tamar .....	1 077	5 707	34.0	320.6
North-Eastern .....	189	557	1.6	23.3
Total Northern .....	1 266	6 264	35.6	343.9
North-Western .....	1 032	5 099	28.8	298.8
Western .....	103	365	1.8	18.4
Total Mersey-Lyell .....	1 135	5 464	30.6	317.3
Total Tasmania .....	4 268	21 564	123.0	1 216.3

(a) Includes all retail establishments except bread and milk vendors.

(b) Includes working proprietors.

(c) Excludes drawings by working proprietors.

**Quarterly Estimates of Value of Retail Sales**

Each quarter, the ABS collects returns of retail sales from a sample of all retail businesses recorded in the most recent census of retail establishments. The sample is maintained between censuses by the addition of new businesses and the deletion of businesses which have ceased trading.

From June quarter 1982 the survey has been based on results of the 1979-80 census of retail establishments. It is important to note that there have been changes in the scope,

coverage and commodity definitions from those used in the previous sample survey based on the 1973-74 retail census.

Comparison of estimates in this series with estimates from the previous series, based on the 1973-74 census, are facilitated by the inclusion of estimates for the June quarter 1982 on each basis.

The following tables set out details of estimated value of retail sales, by commodity groups.

Estimated Value of Retail Sales by Commodity Groups, Tasmania  
(\$ million)

Year or quarter	Commodity group					
	Groceries	Fresh meat	Other food	Beer, wine, and spirits	Clothing, drapery, and footwear	Kitchenware, china, glassware and electrical goods
1973-74 .....	63.8	26.2	35.8	47.8	76.1	38.9
1977-78 .....	120.8	37.6	64.0	91.6	133.1	82.1
1978-79 .....	134.1	46.8	75.5	99.0	138.5	80.9
1979-80 (a) .....	168.0	55.9	71.9	105.6	151.0	81.2
1980-81 .....	171.5	55.2	99.0	114.0	154.6	89.6
1981-82 .....	195.1	60.3	106.8	122.3	166.6	95.8
1982—						
March .....	49.1	15.2	26.5	31.1	38.3	20.9
June (b) .....	48.3	15.1	26.0	29.2	44.3	23.5
June (c) .....	51.3	15.1	21.9	25.7	47.1	25.2
September .....	52.9	15.8	23.2	27.5	44.4	25.4
December .....	62.2	16.5	25.3	33.1	51.6	32.2
1983—						
March .....	58.7	14.2	22.7	30.9	42.7	24.9

Year or quarter	Commodity Group					Seasonally adjusted, total (excl. motor vehicles etc.)
	Furniture and floor coverings	Cosmetics, medicines, etc.	Newspapers, books and stationery	Other goods	Total (excl. motor vehicles etc.)	
1973-74 (a) .....	21.4	20.2	13.1	31.3	374.5	..
1977-78 .....	37.8	34.2	29.4	54.8	685.4	..
1978-79 .....	37.5	39.8	33.0	60.5	745.6	..
1979-80 (a) .....	39.0	36.7	31.4	76.2	816.9	..
1980-81 .....	39.9	47.2	41.9	72.8	885.7	..
1981-82 .....	42.3	51.2	43.8	83.9	968.1	..
1982—						
March .....	9.2	11.8	10.1	20.5	232.7	246.3
June (b) .....	11.1	12.4	9.9	20.5	240.3	245.7
June (c) .....	11.2	12.4	9.8	20.8	240.4	245.8
September .....	10.3	12.8	10.5	21.9	244.7	255.4
December .....	11.2	14.2	12.7	27.1	286.1	255.0
1983—						
March .....	9.3	11.1	10.7	21.1	246.4	262.5

(a) Actual retail census results.

(b) These and earlier estimates are based on results of the 1973-74 retail census.

(c) These and subsequent estimates are based on 1979-80 retail census and are not strictly comparable with earlier estimates.

From April 1982 a new series of monthly retail sales estimates by industry group has been published by the ABS. The monthly survey is based on a random sample of retail

and selected service establishments (hotels, cafes, restaurants, etc.) drawn from the 1979-80 retail census. This sample is maintained by the addition of new businesses and deletion of businesses which have ceased trading.

The following table presents a series of these estimates together with comparable 1979-80 retail census results.

Estimated Monthly Value of Retail Sales by Industry, Tasmania (a)  
(\$ million)

Period	Grocers, confectioners, tobacco- nists	Butchers	Other food stores	Hotels, liquor stores, licensed clubs	Clothiers	Depart- ment stores	Footwear stores	Hardware stores
1979-80 (b) .....	248.1	40.4	32.2	102.0	68.9	107.2	16.0	13.6
1982—								
August .....	28.2	3.0	3.1	9.4	6.6	8.3	1.4	1.5
September .....	28.8	3.0	3.2	9.5	6.6	9.0	1.6	1.4
October .....	28.7	3.1	3.3	9.9	5.9	8.4	1.4	1.4
November .....	29.0	3.1	3.4	10.2	8.0	10.1	1.6	1.7
December .....	34.3	3.7	3.6	13.9	12.7	17.8	2.0	3.5
1983—								
January .....	28.6	2.8	3.1	10.2	5.8	7.7	1.3	1.4
February .....	27.8	2.9	2.8	9.5	6.2	8.2	1.5	1.2
March .....	31.7	3.6	2.9	10.3	7.3	11.3	1.7	1.5
April .....	29.9	3.2	2.7	9.7	7.9	11.1	1.9	1.3
May .....	29.3	3.5	3.1	9.3	7.9	10.9	1.8	1.5
June .....	29.1	3.7	3.0	9.3	7.5	9.7	1.8	1.3
July .....	30.1	3.8	3.8	9.3	7.1	9.8	1.7	1.4
August .....	31.3	3.6	4.0	9.9	7.2	9.8	1.5	1.5
September .....	31.0	3.4	4.2	10.2	6.8	10.2	1.7	1.7
October .....	31.8	3.5	4.4	10.7	7.2	9.6	1.6	1.7

Period	Electrical goods stores	Furniture stores	Floor coverings stores	Chemists	Newsagents	Other (c)	Total
1979-80 (a) .....	43.4	28.8	12.1	29.2	26.9	41.3	810.2
1982—							
August .....	4.2	2.5	1.1	3.2	3.0	3.8	79.4
September .....	4.2	2.3	1.0	3.1	3.1	3.9	80.7
October .....	3.6	2.4	1.1	3.2	2.8	4.3	79.5
November .....	4.6	2.6	1.1	3.5	3.0	4.3	86.2
December .....	6.9	3.1	1.3	4.4	4.6	5.8	117.6
1983—							
January .....	4.1	2.0	0.8	3.0	2.9	4.1	77.8
February .....	3.9	2.1	0.9	2.9	3.1	4.2	77.2
March .....	5.0	2.5	1.2	3.2	3.4	5.0	90.6
April .....	4.6	2.1	1.1	3.0	3.0	4.8	86.3
May .....	4.9	2.6	1.2	3.0	3.0	4.6	86.6
June .....	4.4	2.9	1.1	3.2	2.9	4.4	84.3
July .....	4.2	2.5	1.1	3.1	2.9	4.6	85.4
August .....	5.0	3.0	1.2	3.1	2.9	5.3	89.3
September .....	4.5	2.9	1.2	3.2	2.8	5.1	88.9
October .....	4.1	2.9	1.1	3.1	3.1	5.7	90.5

(a) Series is based on the 1979-80 Retail Census. For standard errors of level and movement of monthly data, see the appropriate issue of the publication *Retail Sales of Goods (Excluding motor vehicles, parts, petrol, etc.)*, (8501.0).

(b) Actual retail census results. Excludes (with the exemption of ASIC classes 9232 and 9233) single establishment enterprise with turnover of less than \$50 000.

(c) Includes general stores, other goods stores, hairdressers and cafes and restaurants.

## EXPORT FINANCE AND INSURANCE CORPORATION

The Export Finance and Insurance Corporation (EFIC) is a public instrumentality guaranteed by the Federal Government. EFIC's statutory function is the encouragement of trade with overseas countries by providing a specialised range of insurance, guarantees and financing facilities not normally obtainable from commercial insurers. It is required to operate on commercial lines and to be self-supporting. Australia-wide, EFIC has approximately 1 200 policyholders and insures approximately \$2 billion worth of Australian exports each year.

### *Range of EFIC Facilities*

Facilities provided by EFIC fall into five main categories:

- (i) insurance of exporters against the risk of non-payment by overseas buyers for a variety of commercial, economic and political risks;
- (ii) guaranteeing Australian banks and financial institutions in respect of finance they provide to Australian exporters;
- (iii) financing, at concessional rates of interest, Australian exports of capital goods and related services to match overseas competition;
- (iv) insuring Australian firms investing in enterprises in foreign countries against the risk of loss from expropriation, war damage or exchange transfer delays;
- (v) assisting banks and insurance companies to provide the various types of bonding facilities and insuring exporters against the possible unfair calling of bonds established as support for export transactions.

### *Assistance with Finance*

EFIC does not provide finance for goods sold on relatively short payment terms. However, claims payable under EFIC's policies may be assigned to the bank or financial institution that is backing the policyholder. In this way, the EFIC policy can be used by the exporter as a form of collateral security to assist in financing his export trade.

### *Cost of Cover*

Premium rates are based on the markets to which the exporter ships and the length of credit which he extends to his overseas customers. At present, the average rate over the whole range of EFIC short-term business is less than 50c per \$A100 of exports insured.

### *Activities within Tasmania*

The EFIC Office serving the Victoria-Tasmania region is located in BHP House, 140 William Street, Melbourne (Telephone (03) 67 5302). Contact can also be made through the Regional Director, Department of Trade and Resources, Continental Building, 162 Macquarie Street, Hobart. During 1982-83, 12 Tasmanian EFIC policyholders had total export cover of \$3.55 million. Other Tasmanian companies had export insurance cover with EFIC arranged through their mainland head offices. Principal Tasmanian exports covered were dairy produce, fresh fruit and vegetables, and timber.

## TOURISM

*This section, apart from the 'Tourist Industry' and 'Tourist Accommodation Statistics', has been contributed by the Department of Tourism.*

### **Introduction**

Tasmania is unique among the Australian States because it is an island with relatively short distances separating population centres. The populated areas of the State are serviced by a main road network of a high standard and, in addition, the scenery and topography (see also the section 'Physiography' in Chapter 2) is fascinatingly varied. Without travelling for any great distance one can encounter long white beaches, coastal



heaths and sand dunes, dense rain forests, rugged mountains, alpine moors and snow country, undulating hill country, fertile river valleys, numerous lakes and rivers, lush green pastures, orchards, convict ruins, many fine examples of early colonial architecture and extensive hydro-electric developments. Angling, bushwalking and caverneering are strong attractions for enthusiasts. As a result, tourism is of great importance to Tasmania and is vigorously promoted.

### Passenger Arrivals

The passenger statistics collected by the Department of Tourism do not represent tourists, as they include Tasmanians returning to the State and visitors travelling for reasons other than tourism, such as business. They do, however, indicate general movements in tourist travel to the State.

Over the past six years, monthly passenger arrivals have usually conformed to a marked seasonal pattern distinguished by an accentuated trough in July, a major peak in January and minor peaks in October and April.

During 1982-83 the number of passengers who travelled to Tasmania was slightly over 560 000 which constitutes an overall decrease of 5.7 per cent on the almost 596 000 passengers in 1981-82. Of this 560 000, nearly 90 per cent travelled by air.

Over 6 000 passengers (1.11 per cent of total passenger arrivals during 1982-83) entered Tasmania with the Hobart-Christchurch air service. Approximately 57 per cent of passengers (around 323 000) entered Tasmania via the main northern ports of entry—Wynyard, Devonport and Launceston.

The next table shows passenger arrivals dissected by month and port of entry for 1982-83. (For details of recorded interstate arrivals and departures for recent years, see the section 'Interstate Arrivals and Departures' in Ch. 6).

Passenger Arrivals, Tasmania, 1982-83  
(Source: Department of Tourism)

Month	Port of entry								Total
	Hobart	Launceston	Wynyard	Devonport			King	Flinders	
				By Air	By Sea	Total			
							Is.	Is.	(a)
July .....	14 166	10 201	2 211	2 047	2 923	4 970	273	43	31 895
August .....	19 799	14 524	3 047	3 794	4 591	8 385	276	47	46 111
September .....	20 058	15 181	3 258	3 550	5 299	8 849	401	42	47 827
October .....	21 547	16 700	3 329	3 071	6 608	9 679	355	59	51 707
November .....	15 700	13 568	2 523	2 738	5 381	8 119	278	40	40 282
December .....	22 686	18 125	3 971	4 838	5 274	10 112	451	110	55 509
January .....	26 508	23 603	4 278	5 925	6 636	12 561	664	95	67 792
February .....	18 410	14 147	2 878	3 362	5 219	8 581	261	58	44 398
March .....	21 089	15 764	2 508	3 166	5 124	8 290	423	45	48 153
April .....	17 338	14 127	2 955	3 293	6 171	9 464	318	59	44 336
May .....	17 950	13 761	2 874	3 599	4 948	8 547	291	54	43 645
June .....	18 435	11 852	3 189	2 970	4 013	6 983	329	22	41 103
Total .....	233 686	181 553	37 021	42 353	62 187	104 540	4 320	674	562 758

(a) Includes traffic into Smithton, Strahan and Queenstown.

Almost all vehicle traffic and passenger sea traffic from the mainland to Tasmania is between Melbourne and Devonport on the Australian National Line's 'sea road' service. The next table shows details of Bass Strait vehicle and passenger sea traffic from Melbourne to Devonport for 1982-83 by month of arrival.

**Bass Strait Vehicle and Passenger Sea Traffic: Melbourne to Devonport 1982-83**  
(Source: Department of Tourism)

<i>Month</i>	<i>Motor vehicles</i>	<i>Caravans and trailers</i>	<i>Passengers</i>
July .....	913	18	2 923
August .....	1 275	29	4 591
September .....	1 578	58	5 299
October .....	1 902	88	6 608
November .....	1 484	44	5 381
December .....	1 362	54	5 274
January .....	1 591	48	6 636
February .....	1 453	51	5 219
March .....	1 379	40	5 124
April .....	1 591	39	6 171
May .....	1 369	13	4 948
June .....	1 168	20	4 013
<b>Total .....</b>	<b>17 065</b>	<b>502</b>	<b>62 187</b>

### Department of Tourism

The Department of Tourism is responsible for the development of Tasmania as a tourist destination. It pursues this objective through the provision of travel information, sales and marketing services for tourists, the provision of financial assistance for approved tourism development projects, the registration of all categories of commercial accommodation, regulation of the erection of certain types of road-side signs in non-urban areas and through research into specific aspects of Tasmania's tourist industry.

During the year expenditure on advertising, promotional and publicity activities amounted to \$1.96 million. National advertising campaigns conducted during the year incurred an expenditure of about \$1.2 million.

The sales arm of the Department consists of the Tasmanian Government Tourist Bureaux which are located at Hobart, Launceston, Devonport, Burnie, Queenstown, Melbourne, Canberra, Sydney, Brisbane, Adelaide and Perth. These bureaux display promotional material relating to Tasmania, disseminate Tasmanian tourist information, answer specific inquiries, organise and sell package tours within the State, and assist and act as agents for other travel organisations which provide tourist services to and within Tasmania. In turn, the bureaux are represented throughout Australia, in New Zealand and in Papua New Guinea, by some 870 accredited travel offices. Sales and Promotion Officers are attached to the Australian Tourist Commission, New Zealand and are located in Auckland and Christchurch.

During 1982-83, the sales receipts of all bureaux amounted to \$33 161 478 of which 63.6 per cent was generated outside Tasmania. This represents an increase of 6.4 per cent on receipts of \$31 180 952 for the previous year. Receipts of the mainland bureaux increased by \$900 000 compared with an increase of \$1 079 675 in receipts of the Tasmanian bureaux.

The Department also promotes capital investment in tourist accommodation, transport and facilities by providing loans, guarantees and grants for approved projects. During 1982-83 the Minister for Tourism approved 40 grants to a value of \$685 473 to municipal councils, sporting bodies and other organisations for tourism promotional activities and other development projects throughout the State.

### *Value of Tourism*

The Department of tourism commissioned the Centre for Regional Economic Analysis (CREA) at the University of Tasmania to undertake a study of the value of tourism to the Tasmanian economy.

This study was based on travel expenditure data obtained from the Department's 1981 Visitor Survey and from the Domestic Travel Expenditure Survey conducted by the

Bureau of Industry Economics in 1981-82. It made use of the 1977-78 Input Output Model of the Tasmanian Economy and the *Orani-Ores* econometric model.

The study found that travel expenditure within the State in 1981 made a contribution of some \$245 million towards Tasmania's Gross Domestic Product and generated employment of some 16,000 persons, or 9.6 percent of the work-force. These estimates allowed for leakages on imports, and included the multiplier effects of travel expenditure, i.e. the direct effect, plus the indirect and consumption-induced effects.

Further estimation by the Department indicated that tourism's contribution of \$245 million represented 7.2 percent of Tasmania's Gross Domestic Product in 1981, exceeding that of the individual industries comprising the primary sector of the economy, viz. agriculture, forestry, fishing and hunting, and mining, and of the major industries in the manufacturing sector.

### **The Tasmanian Tourist Council**

The Tasmanian Tourist Council represents the private sector of the tourist industry, and its extensive State-wide membership is drawn from businesses and organisations both directly and indirectly involved in tourism. It is acknowledged by the State Government to be the voice of private enterprise, and as such works closely with the Department of Tourism in the development of Tasmania's visitor industry.

Regional tourism interests have the opportunity to co-ordinate their activities through the various Divisions of the Council, and each Division is represented on the Council's Board of Management. The Board of Management also includes representation from industry, affiliated associations and various tourism orientated State Government departments.

In its publishing role, the Council produces annually the *Official Visitors Guide to Tasmania*, and the widely accepted *Let's Talk About* series of publications.

In 1976 the Council held its first annual tourism seminar at Devonport. This event is now firmly established on the tourist industry calendar, and is conducted each year at different venues around the State. As well as providing an educational forum for the tourist industry, these seminars also involve the local community and serve to demonstrate the benefits that tourism can contribute to the local economy and life-style.

### **The 'Tourist Industry'**

In terms of the industrial structure of the economy there is no identifiable sector which can be regarded as the 'tourist industry'. The difficulty is that the provision of goods and services for tourists cannot generally be distinguished from the provision of goods and services for residents. Receipts from tourists for goods and services purchased contribute in varying degrees to the total receipts of a wide range of businesses. Tourists might, for example, be expected to use the services of the insurance industry or to purchase furniture to only a very limited extent whereas, at the other end of the scale, they would be major users of the services provided by the accommodation industry.

Rather than attempt to delineate a separate 'tourist industry' it is therefore much more meaningful to examine the 'tourist impact' on industries within the accepted industrial structure.

A major part of tourist expenditure is on accommodation. Hence information obtained from establishments which provide accommodation for tourists will reflect tourist impact. It will, of course, also include expenditure by residents (e.g. public bar trade of licensed hotels). The next section contains statistics relating to Tasmanian accommodation establishments. (See also the section 'The Licensing Board' in Chapter 9.)

### **Tourist Accommodation Statistics**

#### *Census, 1979-80*

The second census of tourist accommodation establishments covered operations for





*Lower Gordon River, South-West Tasmania*

[Copyright Ralph Lindsay]





*Second Split, Gordon River, South-West Tasmania*

[Copyright Chris Noone]





*Sir John Falls on the Gordon River, South-West Tasmania*

[Copyright Geoff Lea]





*First Split, Gordon River, South-West Tasmania*



the 1979-80 year. Census data for 1979-80 are comparable to 1973-74 Census data (see Chapter 18 of the 1977 *Year Book*), except for minor differences in scope and definitions of units and establishment types.

**Hotels and Accommodation Establishments—Summary of Operations by  
Type of Establishment, Tasmania, 1979-80**

Type of establishment	Estab- lishments at 30 June	Persons employed at 30 June (a)	Wages and salaries (b)	Turnover	Stocks		Purchases, transfers in and selected expenses	Value added	Fixed capital expen- diture less disposals
					Opening	Closing			
	no.	no.	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Establishments providing tourist accommodation—									
Licensed hotels—									
With facilities .....	88	2 313	16 644	64 088	1 568	1 797	31 599	32 718	2 958
Without facilities .....	117	1 090	5 359	32 786	1 254	1 390	20 789	12 134	1 564
Motels, etc.—									
With facilities .....	52	527	2 998	9 785	96	112	2 732	7 070	1 644
Without facilities .....	17	41	52	449	9	10	170	280	116
Caravan parks .....	48	137	540	1 925	20	24	680	1 249	290
<b>Total establishments providing tourist accommodation .....</b>	<b>322</b>	<b>4 108</b>	<b>25 593</b>	<b>109 033</b>	<b>2 947</b>	<b>3 333</b>	<b>55 970</b>	<b>53 451</b>	<b>6 572</b>
Establishments providing other accommodation—									
With facilities .....	—	—	—	—	—	—	—	—	—
Without facilities .....	55	297	1 950	6 307	170	213	4 022	2 327	1 569
Camping grounds and caravan parks, n.e.c. ....	11	16	100	80	—	—	18	61	4
<b>Total establishments providing other accommodation .....</b>	<b>66</b>	<b>313</b>	<b>2 050</b>	<b>6 387</b>	<b>170</b>	<b>213</b>	<b>4 040</b>	<b>2 388</b>	<b>1 573</b>
Establishments not providing accommodation .....	66	634	3 661	20 940	751	810	13 511	7 488	963
<b>Total all establishments ...</b>	<b>454</b>	<b>5 055</b>	<b>31 304</b>	<b>136 359</b>	<b>3 868</b>	<b>4 355</b>	<b>73 520</b>	<b>63 327</b>	<b>9 108</b>

(a) Includes working proprietors.

(b) Excludes drawings by working proprietors.

**Hotels and Accommodation Establishments—Accommodation Capacity by Type of Establishment,  
Tasmania, 1979-80  
(number)**

Type of establishment	Number of establishments at 30 June	Accommodation capacity at 30 June 1980						
		Rooms, units, suites, cabins		Beds (a)		Powered sites for caravans		Unpowered sites for tents and caravans
		With facilities	Without facilities	Single (incl. three quarter)	Double	On site vans	Other	
Establishments providing tourist accommodation—								
Licensed hotels—								
With facilities .....	88	2 610	31	3 564	1 511	—	—	—
Without facilities .....	117	41	1 076	1 447	281	—	6	16
Motels, etc.—								
With facilities .....	52	1 227	16	1 793	1 034	—	—	—
Without facilities .....	17	14	177	267	59	—	—	—
Caravan parks .....	48	29	35	212	44	316	2 200	1 813
Total establishments providing tourist accommodation .....	322	3 921	1 335	7 283	2 929	316	2 206	1 829

*continued next page*



**Hotels and Accommodation Establishments—Accommodation Capacity by Type of Establishment,  
Tasmania, 1979-80  
(number)—continued**

Type of establishment	Number of establishments at 30 June	Accommodation capacity at 30 June 1980						
		Rooms, units, suites, cabins		Beds (a)		Powered sites for caravans		Unpowered sites for tents and caravans
		With facilities	Without facilities	Single (incl. three quarter)	Double	On site vans	Other	
Establishments providing other accommodation—								
With facilities .....	—	—	—	—	—	—	—	—
Without facilities .....	55	36	2 381	3 199	63	—	—	—
Camping grounds and caravan parks, n.e.c. ....	11	—	6	60	—	16	206	405
Total establishments providing other accommodation .....	66	36	2 387	3 259	63	16	206	405
Establishments not providing accommodation .....	66	—	—	—	—	—	—	—
Total all establishments ...	454	3 957	3 722	10 542	2 992	332	2 412	2 234

(a) Includes divans normally used as beds. Excludes beds in on-site vans and all cots.

### *Survey of Tourist Accommodation*

A survey of tourist accommodation has been conducted by the Bureau each quarter since the Census of 1973-74. Statistics are obtained in respect of each month in a particular quarter. The scope of the current survey is the same as that for the 1973-74 Census except for the omission of holiday flats until the June quarter 1982. Holiday flats have been included from and including the June quarter 1982 because of the growing significance of this segment of the tourist accommodation industry.

The following definitions apply:

**Tourist Accommodation Establishment:** There is no generally accepted definition of a tourist accommodation establishment but, for the purpose of the surveys, a tourist accommodation establishment has been defined as an establishment which provides accommodation of a predominantly short term nature (i.e. for periods of less than two months) available to the general public. Note that data are collected and published for both long term and short term guests at these establishments.

**Licensed Hotel with Facilities:** A tourist accommodation establishment which is licensed to operate a public bar, provides bath or shower and toilet in most guest rooms, and has breakfast available for guests.

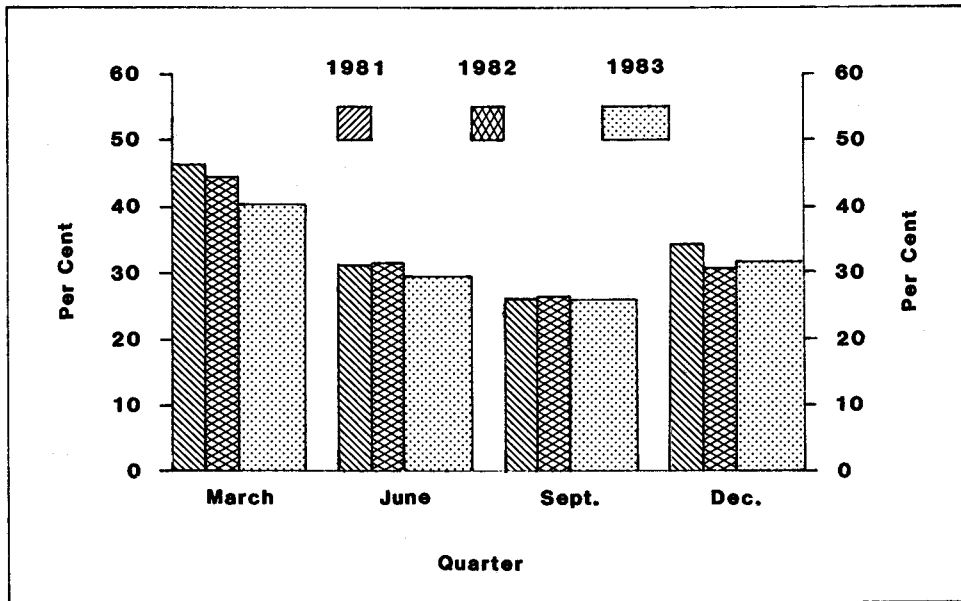
**Licensed or Unlicensed Motel, Private Hotel or Guest House with Facilities:** A tourist accommodation establishment which provides bath or shower and toilet in most guest rooms and has breakfast available for guests, but is not licensed to operate a public bar. This category also includes motels that are licensed to serve liquor with meals.

**Caravan Park:** A tourist accommodation establishment which provides powered sites for caravans, and toilet, shower and laundry facilities for guests.

**Holiday Unit Establishment:** A tourist accommodation establishment other than an hotel or motel which provides separate self-contained units (flats). Each unit must have

separate sleeping, cooking, bathroom and toilet facilities. Establishments not registered as 'holiday flats' under provisions of the *Tourism Act 1977* and those comprising less than five self-contained units are excluded.

**Bed Occupancy Rates: Accommodation Establishments with Facilities (a), Tasmania**



(a) Hotels, motels, etc. which provide a bath or shower, and a toilet in most guest rooms.

The following tables include details from the survey for recent periods:

**Hotels and Motels, etc., Holiday Unit Establishments and Caravan Parks: Number and Capacity, Tasmania**

Period	Hotels and Motels, etc.			Holiday Units			Caravan Parks	
	No. of establishments	No. of guest rooms	No. of bed spaces	No. of establishments	No. of units	No. of bed spaces	No. of establishments	No. of sites and cabins
At 31 March—								
1978	122	3 623	9 343	..	..	..	47	3 838
1979	124	3 672	9 636	..	..	..	51	4 340
1980	126	3 763	9 987	..	..	..	53	4 600
1981	131	3 933	10 567	..	..	..	54	4 951
1982	142	4 124	11 339	..	..	..	55	4 881
1983	142	4 248	11 691	30	408	1 777	53	4 798
At end of—								
June 1982	142	4 105	11 302	30	357	1 618	54	4 806
Sept. 1982	143	4 221	11 581	29	348	1 562	54	4 813
Dec. 1982	143	4 222	11 601	30	391	1 705	54	4 815
March 1983	142	4 248	11 691	30	408	1 777	53	4 798
June 1983	142	4 252	11 667	30	409	1 781	53	4 835

**Hotels and Motels, etc: Holiday Unit Establishments and Caravan  
Parks: Occupancy rates and takings from accommodation, Tasmania**

Period	Hotels and Motels, etc.		Holiday Units		Caravan Parks	
	Room occupancy rates (per cent)	Takings (\$'000)	Unit occupancy rates (per cent)	Takings (\$'000)	Site occupancy rates (per cent)	Takings (\$'000)
January 1978	73.2	2 054	..	..	52.5	205
January 1979	74.4	2 304	..	..	55.2	281
January 1980	72.7	2 550	..	..	51.7	322
January 1981	68.7	2 820	..	..	53.0	386
January 1982	68.7	3 324	..	..	55.3	421
January 1983	60.2	3 088	88.5	412	53.8	437
1982— April	54.3	2 461	55.9	201	22.7	188
May	46.5	2 079	55.7	209	16.5	133
June	41.3	1 780	52.1	186	15.0	114
July	32.0	1 453	37.1	126	11.9	92
Aug.	42.3	1 888	45.3	152	13.0	103
Sept.	46.9	2 012	55.4	189	14.8	128
Oct.	49.6	2 437	52.7	211	16.9	135
Nov.	49.7	2 276	50.0	198	19.3	153
Dec.	42.2	2 064	53.4	223	27.1	246
1983— Jan.	60.2	3 088	88.5	412	53.8	437
Feb.	51.3	2 330	73.9	306	34.8	269
March	63.7	3 153	70.9	315	25.4	227
April	50.7	2 374	54.4	246	21.0	184
May	45.6	2 029	51.7	227	15.4	139
June	37.5	1 671	51.4	217	15.5	123

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## **Chapter 17**

### **TRANSPORT AND COMMUNICATION**

#### **PORT AUTHORITIES**

##### **Introduction**

Tasmania has a number of ports capable of accommodating overseas vessels; they are sited on the Derwent and Huon Rivers in the south (Hobart and Port Huon); in Spring Bay on the east coast; on the river Tamar in the north (Inspection Head, Long Reach and Bell Bay); on the Mersey River (Devonport), in Emu Bay (Burnie) and at Port Latta, all in the north-west. All these ports provide depths of approximately nine metres or more of water at berths; Port Latta provides a depth of 16 metres nearly one and a half kilometres off-shore.

Interstate and intrastate trade passes through the main ports and operates as well through ports at Strahan, Stanley, Ulverstone, Currie (on King Island) and Lady Barron (on Flinders Island).

This section deals primarily with the authorities which control the harbours but a brief description is given of the main ports.

##### **Port of Hobart**

###### *Location*

The approach to the Derwent and the Port of Hobart is made through a very wide strait between Cape Queen Elizabeth (Bruny Island) and Cape Raoul (Tasman Peninsula), approximately 50 kilometres south-east of the city. The mouth of the Derwent, five and a half kilometres wide, lies 19 kilometres south-east of the port which is built upstream on the western bank in a sheltered cove; the opposite bank lies two and a half kilometres away to the east. The shores of the Derwent and the arms of the cove act as natural breakwaters.

###### *Description*

The present main port is situated in the Sullivan's Cove and Macquarie Point area. Sullivan's Cove is U-shaped with 610 metres separating the southern and northern arms. The southern area is devoted to Princes Wharf with berths numbered one to four although No. Four is now occupied by the CSIRO. Between Nos. 1 and 2 is Princes Intermediate, the bulk grain berth. The centre of the cove contains Elizabeth Street Pier, while the northern area is made up of Macquarie Berths No. 1, 2 and 3. Turning up river from the outer end of Macquarie Berth No. 3, the area known as Macquarie Point has been developed to provide the port with two additional roll-on roll-off berths and one container/general cargo berth. This area has now become the major centre of port activity, and has been provided with modern cargo handling equipment, including a 254-tonne fully mobile crane, suitable for handling containers. The two roll-on roll-off berths are operated by the Union Steamship Company's 'Seaway' interstate service, connecting Hobart with Melbourne and Sydney. The third new berth is 224 metres long and is capable of accommodating the largest general cargo carriers in service. Adjacent to these new berths is 8.4 hectares of sealed cargo area, three large all weather cargo sheds, a dual rail spur connecting into the State's main rail system and adequate holding points for refrigerated containers.

The most striking feature of the Port of Hobart is the ease with which large vessels can be brought to berth. Tides present no problem, the maximum rise and fall being 1.37 metres (average approximately 0.61 metres), and dredging of approach channels has never been necessary.

#### *Subsidiary Ports*

In addition to the main port in the heart of the city, there are a number of subsidiary outlets serving the south of the State. Port Huon wharf, located on the west bank of the Huon River near Geeveston, is in the centre of the principal orcharding area and used mainly for fruit exports. Also based on the Huon River (at Hospital Bay) is the APM Ltd private wharf (for export of paper pulp). At the Port of Spring Bay near Triabunna on the east coast, accommodation has been provided for bulk carriers loading woodchips for Japan. In the Derwent itself, four kilometres upstream from the main port, is a tanker berth at Selfs Point where bulk petrol and oil are stored; tankers pass under the 47-metre high navigation span of the Tasman Bridge on their way to Selfs Point.

The Selfs Point area has been developed as a petroleum products storage area and has replaced the Macquarie Wharf facilities as Hobart's petroleum installation. One and a half kilometres upstream from Selfs Point is the Electrolytic Zinc Company Ltd private wharf at Risdon. At Boyer, located nearly 32 kilometres upstream from the main port, is the Australian Newsprint Mills Ltd plant. Newsprint is ferried to the main port by barge.

#### *Administration*

The Marine Board of Hobart is the authority controlling the main ports of Hobart, Port Huon, Strahan, and the Port of Spring Bay. The Board's jurisdiction covers the west, south and east coasts of Tasmania between the parallel of  $41\frac{1}{2}^{\circ}$  south latitude and Cape Portland.

### **Port of Launceston**

#### *Location*

The Port of Launceston is situated on the River Tamar, which originates at the confluence of the North Esk and South Esk Rivers at the City of Launceston and flows 60 kilometres to Bass Strait where deep water and broad expanses of river provide a valuable natural harbour. In this area, encompassing Bell Bay, Inspection Head and Long Reach, are located the major activities of the Port of Launceston. A tidal range of up to 3.6 metres creates strong tidal currents, which by natural scour eliminate the need for any maintenance dredging in the lower reaches of the river.

Because extensive areas of deep water frontage are available, the development of the port is decentralised with the main operations located as follows:

- (i) *Bell Bay*: The Bell Bay site is on the eastern shore, some 13 kilometres upstream from the mouth of the Tamar. The Bell Bay and Long Reach areas are linked to the railway system. Wharves include the Comalco Aluminium Bulk Berth, the ANL Melbourne/Sydney roll-on roll-off/lift-on lift-off Cargo Terminal, the Temco Bulk Berth, the PLA tanker berth and the PLA Common User Berth general cargo berth. The port has large, modern cold store facilities, stock-yards and petroleum and LP gas storage tanks.
- (ii) *Long Reach*: Port facilities have been developed upstream from Bell Bay, the main function being export of woodchips from adjacent plants.
- (iii) *Inspection Head*: Overseas berths are situated on the western bank, opposite Bell Bay, for shipment of fruit, frozen meat, fish, wheat and general cargo. Large cool storage and freezer facilities are provided as well as bulk storage and special loading facilities for tallow.
- (iv) *Kings Wharf, Launceston*: Includes berths for interstate and intrastate trade; facilities also include a graving dock and shiplift and fitting-out berths for docking and repair of vessels up to 2 200 tonnes.

### *Description*

All berths and facilities now in service in the port have been constructed since about 1950. Channel and lighting improvements in the lower reaches have been carried out over recent years, permitting vessels drawing up to 11.1 metres to work the river for 16 kilometres from Bass Strait to the site of the new woodchip berths in Long Reach. The channel improvement works were designed to provide for the rapidly growing industrial complex at Bell Bay which is creating an ever increasing demand for large bulk carriers.

### *Administration*

The port is administered by the Port of Launceston authority whose jurisdiction covers the full length of the river Tamar, together with the northern coastline westward to Badger Head and eastward to Cape Portland.

## **Port of Devonport Authority**

### *Location*

The port of Devonport is situated on the Mersey River within two kilometres of the coast. The entrance is sheltered by Mersey Bluff on the west and by a retaining wall extending over half a kilometre northward from the eastern shore of the river. The river was always a natural harbour for small craft and its development as a major port by extensive dredging and engineering works has resulted in a secure harbour for large ships.

### *Description*

The main harbour is formed around two turning basins, each 259 metres in diameter with wharves on both banks providing 1 067 lineal metres of berthage.

The western bank contains four overseas and interstate berths and one specialised cattle jetty. These berths are provided with storage sheds, oil pipelines, wheat silos, bulk cement silos and bulk tallow silos, as well as one of the largest and most modern cold storage facilities in the State. Provision has also been made for the handling of bulk commodities and heavy lifts while all berths are connected to the railway network.

Two terminals for roll-on roll-off and container cargo are located on the eastern bank; one is leased to the Australian National Line and the other is a common-user facility. Both are equipped with stern loading ramps and cranes for lift-on lift-off cargo. Extensive vehicle marshalling and cargo assembly areas are provided, with land available for expansion. Both major unitised and container operating berths are fully equipped with power points for refrigerated containers. Approximately 115 000 passengers pass through the No. 1 Terminal each year. In July 1972 the *Empress of Australia* replaced the *Princess of Tasmania* on the passenger run to and from Melbourne. The ANL vessels *Sydney Trader*, *Brisbane Trader*, and *Townsville Trader* maintain a regular cargo service from both terminals.

A 30-tonne portal travelling crane at No. 2 Berth is capable of handling all types of cargo units. For the speedy handling of bulk cargoes a 14-tonne grab and 40-tonne capacity hopper are available as auxiliaries to the crane. A 30-tonne portainer crane operates at No. 1 Berth. Further extensions of port facilities will depend on proposed expansion by major industries in the area.

## **Port of Burnie**

### *Location*

The ports of Hobart, Launceston and Devonport all lie within the shelter of rivers but the Port of Burnie, on Emu Bay, was built out into the open sea in the lee of Blackman Point. Protection from the potentially rough seas of Bass Strait is afforded by two large breakwaters. Burnie is a deep-water port with no tidal restrictions, except occasionally for the larger vessels, and is virtually fog-free. It is in operation 24 hours every day, and

vessels can be at full speed 20 minutes after departure. All wharves are connected to the State railway system.

### *Description*

The shelter necessary for all-weather use of the port is provided by a 380-metre breakwater extending from Blackman Point in a south-easterly direction. The wharves are thus protected by the point and by the breakwater from swells coming in from the west or north, the two quarters from which heavy seas are feared. Ocean Wharf is constructed immediately in the lee of the breakwater, the two structures appearing as one. Other berths are provided by piers basically parallel to the breakwater but lying further south.

An island breakwater sited north-east from the end of Ocean Wharf and consisting of concrete caissons 488 metres long, is orientated south-east and is calculated to give ample protection for up to 610 metres of berthage south of existing piers. An interesting feature is the use of the lee of the island breakwater for a tanker berth for both petroleum and sulphuric acid. The fuel is pumped to the land along a submarine pipe, and the sulphuric acid is pumped from the berth over a bridge spanning the gap between the two breakwaters.

A modern passenger and roll-on roll-off cargo terminal handles general cargo shipped by Australian National Line vessels servicing Melbourne, Sydney, Fremantle and Queensland ports. The terminal is equipped with a 35 tonne container handling crane with a 50 tonne heavy lift capacity. A further roll-on roll-off berth at North McGaw Pier handles general cargo for the Adelaide service. In recent years Burnie has emerged as Tasmania's international general cargo port with regular services to Europe, the Middle East, South Africa, South-East Asia, the Far East and the West Coast of North America.

Burnie has five other berths in regular use. Ocean Wharf and North McGaw are conventional berths used for general cargo. South McGaw Pier is equipped with one 12-tonne and one 28-tonne crane. Jones Pier North is a bulk cargo berth, capable of handling vessels up to 250 metres in length and 10.0 metres draft. It is traversed by a conveyor loader, owned by the Emu Bay Railway Company Ltd, with a loading rate of 1 270 tonnes per hour. It handles zinc, lead and copper concentrates from the west coast mines. Jones Pier South is the port's major general cargo berth, used by quarter ramp RORO vessels, and cellular container vessels. It has two large transit sheds, incorporating a cold store. Adjacent to this berth is a container compound with a capacity of 250 standard 'T.E.' units of which 96 may be reefer. There is additional storage area close by for a further 250 units, and also a bulk tallow installation servicing both North and South Berths.

### **Circular Head (Port Latta)**

A deep-water offshore terminal, capable of accommodating bulk ore carriers, has been constructed at Port Latta for the export of iron ore pellets to Japan. The loading facility consists of a 1.2 metre wide conveyor belt which carries pellets to two swivel loaders located 1.6 kilometres offshore. Vessels moor in 15.8 metres of water to take on pellets, the system having a discharge capacity of about 3 050 tonnes per hour.

### **Constitution of Port Authorities**

#### *Election of Wardens*

The present system of choosing port authority wardens is summarised in the following table:



## Port Authorities: Election of Wardens

Authority	Number of wardens	System of election of wardens
Hobart Marine Board .....	9	Special electorate of ship-owners, importers and exporters
Port of Launceston Authority .....	5	Electors of Launceston, Beaconsfield and George Town as for local government elections
Burnie Marine Board .....	9	Municipal electors within proclaimed area
Port of Devonport Authority .....	11	
Circular Head Marine Board .....	7	
King Island Marine Board .....	5	Appointed by the Government
Flinders Island Marine Board .....	3	

## Boards of Hobart and Launceston

The wardens of the Hobart Marine Board are elected by a special electorate of shipowners, importers and exporters. The number of votes that each importer and exporter may exercise is proportional to the value of goods he imports or exports, while ship-owners' voting rights are proportional to the tonnage of their vessels. Three wardens retire each year; the Master Warden is elected by Board members annually.

In the case of the Port of Launceston Authority, marine board electors are those qualified to vote at elections for aldermen of the City of Launceston or for councillors of the municipalities of Beaconsfield and George Town.

## Navigation and Survey Authority of Tasmania

The Authority was constituted in 1963 to implement sections of the *Marine Act 1976* relating to the safety of life and property at sea. Member marine boards contribute equally to the costs of running the Authority; the income is derived from survey and service fees.

## Finances of Port Authorities

The following table gives details of revenue and expenditure for each port authority in 1981-82:

Port Authorities  
Receipts and Expenditure: All Funds, 1981-82  
(£'000)

Particulars	Authority							Total
	Hobart	Launceston	Devonport	Burnie	Circular Head	King Island	Flinders Island	
Revenue Funds								
Receipts—								
Wharfage charges	2 933	3 010	2 017	2 566	236	164	24	10 950
Other service charges .....	2 096	3 644	3 149	1 207	100	55	9	10 260
Plant hire .....	488	590	420	421	21	11	8	1 959
Government grants	—	—	—	—	—	—	—	—
Other (a) .....	888	430	796	384	11	14	34	2 557
Total .....	6 405	7 674	6 382	4 578	368	244	75	25 726
Payments (b)—								
Administration .....	689	1 129	464	668	32	90	3	3 075
Debt charges—								
Interest .....	937	1 131	607	1 602	64	3	11	4 355

*continued next page*

**Port Authorities**  
**Receipts and Expenditure: All Funds, 1981-82**  
 (\$'000)—continued

Particulars	Authority							Total
	Hobart	Launceston	Devonport	Burnie	Circular Head	King Island	Flinders Island	
Revenue Funds								
Redemption and sinking fund contributions .....	803	499	352	663	55	10	8	2 390
Works and services .....	2 554	4 079	2 917	1 645	165	158	65	11 583
Other .....	406	651	335	67	30	28	8	1 525
Total .....	5 389	7 489	4 675	4 645	346	289	95	22 928
Loan Funds								
Receipts, loan raisings, etc .....	697	1 551	1 300	1 528	—	—	—	5 076
Payments (c) .....	782	1 849	7 907	3 484	—	—	—	14 022

(a) Includes interest receipts, sundry licences, fines and discounts received.

(b) Excludes amounts applied from reserves for capital purposes.

(c) Includes amounts applied from reserves for capital purposes.

The principal sources of revenue of the port authorities are shipping tonnage rates and import and export wharfage rates; other sources are charges for pilotage services and the hiring of equipment. Expenditure is summarised under the heading 'works and services' which includes the provision of ordinary port services (e.g. pilotage, tug assistance, etc.), the maintenance of the port (e.g. dredging, etc.) and the improvement of the port (e.g. new wharves, new berths, etc.). To raise the additional funds required to finance port improvements, the authorities borrow money subject to State Treasury approval, the Treasury acting on behalf of the Australian Loan Council.

The next table summarises the transactions of all port authorities for recent years:

**Port Authorities: Tasmania**  
**Receipts and Expenditure: Summary**  
 (\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Revenue Funds</i>						
Receipts—						
Wharfage charges .....	7 466	8 235	9 111	9 950	10 823	10 950
Other service charges .....	6 802	6 830	8 343	8 968	9 906	10 260
Plant hire .....	2 213	2 305	2 251	2 583	2 356	1 959
Government grants .....	32	117	114	137	—	—
Other (a) .....	1 559	1 134	2 084	1 200	1 944	2 557
Total .....	18 072	18 621	21 902	22 839	25 029	25 726
Payments (b)—						
Administration .....	1 939	2 086	2 207	2 611	2 978	3 075
Debt charges—						
Interest .....	3 129	3 531	4 480	4 139	4 058	4 355
Redemption and sinking fund contributions .....	2 452	2 193	2 143	2 098	2 233	2 390
Works and services .....	7 891	7 351	8 778	10 590	11 256	11 583
Other .....	1 354	1 884	3 101	3 220	1 009	1 525
Total .....	16 765	17 046	20 709	22 657	21 534	22 928

**Port Authorities: Tasmania**  
**Receipts and Expenditure: Summary**  
 (\$'000)—continued

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>Loan Funds</i>						
Receipts—						
Loan raisings .....	3 880	2 280	2 700	6 474	2 500	2 940
Other .....	303	394	532	1 100	1 166	2 136
Total .....	4 183	2 674	3 232	7 574	3 666	5 076
Payments (c) .....	4 597	3 522	6 196	8 120	4 990	14 022

(a) Includes interest receipts, sundry licences, fines and discounts received.

(b) Excludes amounts applied from reserves for capital purposes.

(c) Includes amounts applied from reserves for capital purposes.

The following table gives the loan debts of port authorities at the end of each financial year for recent years:

**Port Authorities**  
**Loan Debt of Principal Authorities at End of Year**  
 (\$'000)

<i>Authority</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Hobart .....	13 333	12 616	11 888	11 097	10 487	9 684
Launceston .....	9 936	10 094	11 055	11 820	12 013	12 145
Devonport .....	8 737	9 093	8 821	9 027	9 318	10 242
Burnie .....	13 280	13 871	14 933	15 480	16 259	16 787
Other .....	1 296	1 368	1 205	1 145	(a) 1 068	1 052
Total .....	46 582	47 042	47 904	48 567	49 146	49 910

(a) Comprised: Circular Head, \$782 000; Flinders Island, \$166 000; King Island \$104 000.

The next table summarises annual borrowings, aggregate debt and the provision for loan redemption for recent years:

**Port Authorities, Tasmania**  
**Loan Raisings: Loan Debt and Provisions for Redemption**  
 (\$'000)

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Loan raisings during year (a) .	3 880	2 280	2 700	6 474	2 500	2 940
Loan debt at 30 June .....	46 582	47 042	47 904	48 567	49 146	49 910
Provisions for loan redemption at 30 June (b) .....	1 943	2 392	2 333	2 562	2 854	3 195

(a) No loans were raised from the State Government during the period covered by the table.

(b) Balance of sinking funds and loan redemption provision accounts at end of year.

### TRANSPORT TASMANIA

In 1981 the Parliament of Tasmania passed the *Transport Act* 1981 which repealed the *Transport Act* 1938, abolished 'The Transport Commission' constituted thereunder,

and empowered the Governor to appoint a Commissioner for Transport incorporated as a corporation sole with the corporate name 'Transport Commission'.

The Act provides that in the exercise of its powers, and in the performance of its functions, the Commission is subject to ministerial control except in the issue of any licence under the *Traffic Act* 1925.

The Act provides that the Commissioner for Transport and all persons employed under that Act, together with the Administrator of Road Transport appointed under the *Traffic Act* 1925, shall constitute a body known as the Transport Department. The Department is generally known as Transport Tasmania.

#### **Powers of Transport Tasmania**

The powers can be summarised thus:

- (i) the regulation and control of Tasmania's road, water and intra-state air transport (other than MTT bus services);
- (ii) to enter into contracts for the carrying on and maintenance of intra-state transport services;
- (iii) the commercial manufacture, maintenance, repair and sale of light engineering products;
- (iv) to refund, adjust or exempt prescribed payments or obligations, including motor tax;
- (v) to co-ordinate and improve intra-state transport services and facilities;
- (vi) to operate and conduct intra and inter-state shipping services.

#### **Functions of Transport Tasmania**

The main functions can be summarised as follows:

to devise, initiate and carry out measures for the co-ordination, improvement and economic operation of the means of, and facilities for transport in Tasmania other than rail transport and MTT bus services, and to ensure the provision of adequate transport services for the public; and to administer the *Traffic Act* 1925.

In essence this means:

- (i) administration of the *Traffic Act* and regulations concerning traffic control and facilities;
- (ii) traffic engineering associated with the control of traffic;
- (iii) registration and taxation of motor vehicles;
- (iv) regulation and licensing of commercial goods vehicles;
- (v) regulation and licensing of taxi and hire cars;
- (vi) regulation and licensing of privately operated coach and omnibus services;
- (vii) testing and licensing of drivers of motor vehicles;
- (viii) operation of a State-owned shipping service between Stanley/King Island/Melbourne;
- (ix) operation of the Bruny Island ferry service;
- (x) administration of aerodromes under the control of the State Government;
- (xi) operation of the Australian Standard 1822 engineering workshop in Launceston known as PTA Engineering;
- (xii) traffic related research and economic studies and urban transport co-ordination support;
- (xiii) provision of road safety policy advice and 'in the field' road safety support throughout the State;
- (xiv) provide motor vehicle design advice.

#### **Transport Department Shipping Services**

The Transport Department operates a coastal shipping service between King Island, Stanley and Melbourne and a vehicular ferry service to Bruny Island. During 1982-83 the coastal service was operated by the *Straitsman*. In that year the shipping services carried 23 578 sheep, 22 489 cattle, 148 pigs, and 70 615 tonnes of general cargo. A total

of 325 voyages provided essential services to and from King Island and between Stanley and Melbourne.

On the Bruny Island service the *Harry O'May* is the primary vessel backed up by the ferry *Mangana*.

The construction of new terminals at Kettering on the Tasmanian mainland and Roberts Point on Bruny Island was completed and came into operation in June 1983. The crossing is now much shorter allowing for more frequent sailings.

### Financial Operations

#### Annual Loss

In 1968-69 and earlier years the Commission received two grants from Consolidated Revenue: (i) reimbursement of the previous year's loss; and (ii) a grant equal to State Land Tax collections. From 1969-70, the loss incurred by the Commission for the previous year has been reimbursed by a single grant from Consolidated Revenue.

#### Profit and Loss

#### Transport Department, Tasmania: Trading and Profit and Loss Account (\$'000)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Revenue</i>					
Coastal shipping .....	2 243	2 696	3 338	4 213	4 502
Bruny Island ferry .....	99	102	152	280	212
Tool annexe .....	1 146	1 491	1 871	2 144	2 218
Other revenue .....	638	760	728	r 954	1 208
Net loss (a) .....	3 549	4 338	4 690	4 289	5 475
Total .....	7 675	9 386	10 778	r 11 880	13 615
<i>Expenditure</i>					
Coastal shipping .....	3 362	3 624	3 889	4 385	5 139
Bruny Island ferry .....	680	736	762	852	970
Tool annexe .....	1 395	1 809	2 169	2 447	3 146
General expenditure .....	2 237	3 216	3 959	r 4 196	4 361
Total .....	7 675	9 386	10 778	r 11 880	13 615

(a) To be charged against Consolidated Revenue in the following year.

The remaining transactions can be summarised as follows (road safety accounts are excluded):

#### Transport Department, Tasmania: Motor Taxation Collection, Licensing, etc. (\$'000)

Particulars	1979-80	1980-81	1981-82	1982-83
<i>Revenue</i>				
Motor tax .....	14 821	18 302	18 512	17 025
Public vehicle licensing, fees, etc. ....	1 273	658	287	245
Registration, licences, etc. ....	4 101	5 326	7 666	(a) 7 098
Refunds of stamp duty .....	- 8	- 11	- 11	- 34
Stamp duty on vehicle registrations .....	5 043	5 891	7 927	(b) 9 999
Contributions—Motor Accident Insurance Board .....	—	330	408	497
Transfers from Consolidated Revenue—				
Road transport administration .....	2 404	2 185	2 447	2 592
Traffic engineering section .....	1 296	1 216	1 380	930
Total .....	28 929	33 897	38 615	38 353

continued next page

**Transport Department, Tasmania: Motor Taxation Collection, Licensing, etc.**  
 (\$'000)—*continued*

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>Expenditure</i>				
Profit and loss account (transfers) (c) .....	115	120	135	130
Paid to Consolidated Revenue .....	25 116	30 046	r 34 245	34 202
Administration, traffic control, etc. ....	3 700	3 743	4 220	4 046
<b>Total .....</b>	<b>28 931</b>	<b>33 908</b>	<b>r 38 600</b>	<b>38 378</b>

(a) Includes a fire levy of \$1 422 326 which is included in the fee for registration and renewals of vehicles (other than motor cycles).

(b) Includes \$548 639 stamp duty on premiums due to the Motor Accidents Insurance Board payable to the Transport Department as from 1 July 1981.

(c) Receipts from public vehicle licensing paid into profit and loss account.

## RAILWAYS

### General

Tasmania has a 1 067-millimetre gauge government railway system based on a route network of 864 kilometres. A private railway of 134 kilometres is operated by the Emu Bay Railway Company Ltd between Burnie and Melba Siding (19 kilometres south of Rosebery).

The first Tasmanian railway was the 72 kilometre Deloraine to Launceston line opened in 1871. A 196 kilometre line from Hobart to Western Junction began operating in 1876. (For a brief historical account of the development of the Tasmanian railway system see this section of the 1977 *Year Book*. Chapter 1 of the same edition includes an article on the construction of the main line railway from Hobart to Launceston.)

### *Federal Takeover*

Following negotiations with the Federal Government, the State Government passed the *Railways (Transfer to Commonwealth) Act 1975* which provided for the transfer of control of the State's railway system to the Federal Government with effect from 1 July 1975.

Under the agreement the State retained the following rights: (i) to consult with the Federal Government on any proposals to increase freight rates; (ii) to dispute the abolition of any service where in the opinion of the State Government that service is desirable; and (iii) to consult with the Federal Government on the operation of new or existing railways which are of particular concern to the State. The State was also granted representation on the Australian National Railways Commission and the Australian Shipping Commission for an initial period of five years.

## METROPOLITAN TRANSPORT TRUST

The Metropolitan Transport Trust was established as a statutory authority on 21 December 1954 to provide a system of public transport by road within the metropolitan areas of Hobart and Launceston. The *Metropolitan Transport Act 1954*, constituted the Trust and vested in it, the urban public transport systems, formerly operated by the Hobart and Launceston City Councils. In 1959 bus services operated by a private operator in the Burnie Municipality, were transferred to the Trust. In 1981 State Parliament passed legislation making the Trust subject to ministerial control.

At the time the Trust was established, a major portion of the tramway systems operating in Hobart and Launceston were phased out, and replaced with electric trolley buses. The last tramway service closed down was in Hobart in October 1960. The trolley buses were eventually phased out by 1968 in favour of the more versatile motor bus.

The present MTT service is based entirely on motor buses. As at 30 June 1983 the Trust operated a fleet of 293 buses of which 213 were located in Hobart, 58 in Launceston and 22 in Burnie. Construction of a new bus depot and bus to bus interchange on land owned by the Trust at Springfield in Hobart commenced in 1984.

The number of passenger journeys increased in the financial year ended 30 June 1983 with the introduction of additional concession fares schemes. In previous years there had been a continuing decline in passenger journeys. Among the reasons for this is the increased use of the private motor car and in more recent years the change in shop trading hours to promote family weekend shopping.

#### *Financial Operations of the Trust*

The following table shows the income and expenditure of the Metropolitan Transport Trust for recent years:

Metropolitan Transport Trust, Tasmania Income and Expenditure (\$'000)						
<i>Particulars</i>	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Income</i>						
Traffic operations .....	3 395	4 021	3 988	4 713	5 416	5 438
Other earnings .....	151	165	195	183	210	272
Subsidy, State Government .....	6 615	6 520	7 200	8 390	8 787	9 755
Total .....	10 161	10 706	11 383	13 286	14 413	15 465
<i>Expenditure</i>						
Traffic operations .....	5 013	5 150	5 435	6 131	6 259	6 520
Vehicle maintenance .....	1 532	1 705	1 976	2 390	2 882	3 115
Power and fuel .....	532	647	872	1 179	1 218	1 425
Plant and property maintenance .....	184	190	224	259	285	363
Administration and general .....	2 080	2 151	1 855	2 456	2 713	2 835
Debt charges .....	308	298	304	338	365	395
Depreciation charges .....	504	531	634	706	802	800
Total .....	10 153	10 672	11 300	13 459	14 524	15 453

A break-down of income earned from traffic operations in the three centres for 1982-83 (in \$'000) is as follows: Hobart, 4 106; Launceston, 987; and Burnie, 345.

#### *Loan Debt of Trust*

Net advances to the Trust from the State Loan Fund at 30 June 1983 stood at \$3 967 460.

#### *Operating Statistics*

The next table shows the principal operating statistics for the Metropolitan Transport Trust for recent years:

Metropolitan Transport Trust, Tasmania Operating Statistics					
<i>Particulars</i>	1978-79	1979-80	1980-81	1981-82	1982-83
Route-kilometres (a) .....	462	464	484	493	498
Vehicle-kilometres .....	9 562	9 511	9 973	9 691	9 601
Passenger journeys .....	16 753	16 571	16 401	14 283	14 318
Fare income per passenger journey (b) .....	0.24	0.24	0.29	0.38	0.38
Working expenses per passenger journey (c) .....	0.59	0.63	0.76	0.94	1.00

(a) At end of period. (b) Income from traffic operations only, excludes other earnings.

(c) Excludes debt charges and depreciation.

## ROADS AND BRIDGES

## Scope

The details relating to roads in the following section refer to:

- (i) 'classified' roads;
- (ii) roads of local government authorities; and
- (iii) roads of other government authorities.

A further qualification is that the roads are those normally open to traffic.

## Definitions and Road Lengths

(i) *Classified roads*: These are roads for which the State Government accepts direct responsibility, the construction and maintenance authority being the Department of Main Roads. The length of classified (or State) roads at 30 June 1982 was 3 902 kilometres (see later section for further details).

(ii) *Roads of Local Government Authorities*: The length of roads for which local government authorities accepted responsibility at 30 June 1982 totalled 12 981 kilometres.

(iii) *Roads of Other Authorities*: Roads which were the responsibility of these authorities at 30 June 1982 comprised: roads of the Hydro-Electric Commission, 535 kilometres; Forestry Commission, 4 947 kilometres; total 5 432 kilometres. The Hydro-Electric Commission roads include the Gordon River Road from Maydena to the Gordon River Dam site (85 kilometres) and the Scotts Peak Road which runs from the Gordon River Road to Scotts Peak Dam (35 kilometres).

Apart from some new arterial roads constructed by the Department of Main Roads (e.g. Hobart's southern and eastern outlets), works performed by the Department and local government authorities are almost entirely in the upgrading of existing roads or tracks to a higher standard and the maintenance of existing road standards. Recent construction of roads where no previous route existed has been predominantly attributable to the Forestry Commission in its development of forest areas for commercial use, and to the Hydro-Electric Commission in providing access to power development construction sites. The main areas where the Commission's activities have already affected the road systems are in the upper Derwent; Great Lake; Mersey Valley; the Gordon and Pedder Lakes; and the Pieman River areas.

## Surface of Roads

The following table shows lengths of all roads normally open to traffic classified according to road surface and according to the level of government which accepts responsibility for their construction and maintenance. The proportion of classified (State) roads with sealed surfaces has increased from 72.2 per cent at 30 June 1967 to 87.6 per cent at 30 June 1982.

Length of Roads according to Nature of Surface, Tasmania at 30 June

Type of surface	1977	1978	1979(a)	1980	1981	1982
<i>Classified State Roads</i>						
Sealed (b) .....km	3 188	3 256	3 216	3 274	3 404	3 420
Unsealed (c) .....km	457	439	448	486	502	482
Total .....km	3 645	3 695	3 664	3 760	3 907	3 902
Sealed ratio (d) .....%	87.5	88.1	87.8	87.1	87.1	87.6
<i>Roads of Local Government Authorities</i>						
Sealed (b) .....km	3 998	4 013	3 848	4 302	4 272	4 408
Unsealed (c) .....km	8 816	8 801	8 926	8 666	8 678	8 573
Total .....km	12 814	12 814	12 774	12 967	12 950	12 981
Sealed ratio (d) .....%	31.2	31.3	30.1	33.2	33.0	34.0

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Length of Roads according to Nature of Surface, Tasmania at 30 June—continued

Type of surface	1977	1978	1979(a)	1980	1981	1982
<i>Roads of Other Authorities</i>						
Sealed (b) .....km	122	113	132	136	132	187
Unsealed (c) .....km	5 255	5 604	5 106	5 318	5 496	5 245
Total .....km	5 377	5 717	5 238	5 453	5 628	5 432
Sealed ratio (d) .....%	2.3	2.0	2.5	2.5	2.3	3.4
<i>All Roads</i>						
Sealed (b) .....km	7 308	7 382	7 196	7 735	7 808	8 015
Unsealed (c) .....km	14 528	14 844	14 480	14 529	14 728	14 300
Total .....km	21 835	22 226	21 676	22 264	22 537	22 315
Sealed ratio (d) .....%	33.5	33.2	33.2	34.7	34.6	35.9

(a) Decreases are due to revision of figures by the Department of Main Roads.

(b) Bitumen or concrete.

(c) Includes roads formed or cleared only.

(d) Sealed roads as a proportion of total roads.

**Classified (or State) Roads**

The next table analyses the length of classified roads according to their description and surface. The principal State highways include the following: (i) *Arthur* (73 kilometres), from Sorell to Port Arthur; (ii) *Bass* (279 kilometres), from Launceston to Marrawah in the far north-west; (iii) *Channel* (94 kilometres), from Hobart to Huonville, via D'Entrecasteaux area and Cygnet; (iv) *Huon* (99 kilometres), from Hobart to Hythe via Longley and Huonville; (v) *Lake* (149 kilometres), from Deloraine via Great Lake to Melton Mowbray; (vi) *Lyell* (284 kilometres), from Granton near Hobart, to Strahan; (vii) *Midland* (184 kilometres), from Glenorchy to Launceston; (viii) *Murchison* (78 kilometres), linking the Zeehan and Waratah Highways; (ix) *Tasman* (422 kilometres), from Hobart to Launceston, via east coast and St Helens; (x) *Waratah* (72 kilometres), from Somerset to Waratah.

Classified (or State) Roads, Tasmania,  
Description and Length of Roads at 30 June 1982  
(Kilometres)

Description	Nature of surface		Total
	Sealed (a)	Unsealed (b)	
Highways .....	1 859	98	1 956
Main roads .....	1 085	111	1 196
Secondary roads .....	237	48	285
Tourist roads .....	73	103	176
Developmental roads .....	59	25	84
Subsidised roads .....	108	97	205
Total .....	3 420	482	3 902

(a) Bitumen or concrete. (b) Gravel or stone.

**Expenditure on Roads and Bridges**

As indicated earlier in this section, the responsibility for road construction and maintenance is placed upon the State Government, local government authorities and two public enterprises. The next table gives an analysis of funds available to the State Government for roadworks and of expenditure from State road funds.

Federal Government Road Grants provide the bulk of the funds with a major contribution also coming from motor vehicle taxation, registration fees, etc.

**State Road Funds, Tasmania: Receipts and Payments (a)**  
(\$'000)

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Receipts</i>			
State Government source—			
Motor vehicle and drivers taxation .....	16 048	18 369	18 896
Road maintenance contributions, taxes and charges .....	227	302	388
Loans (b) .....	12 831	11 255	6 931
Petroleum products business franchise licence fees .....	—	—	3 900
Other .....	4 628	5 102	5 556
Federal Government grants .....	27 933	40 965	48 549
Contributions by local government authorities .....	18	18	18
Total .....	61 685	76 011	84 238
<i>Payments</i>			
Construction and reconstruction of roads and bridges .....	42 804	54 687	63 138
Maintenance of roads and bridges .....	13 519	14 840	16 585
Planning and research .....	508	541	—
Total .....	56 831	70 068	79 723

(a) Includes receipts and payments in respect of Forestry Commission and Hydro-Electric Commission roads.

(b) Includes amounts made available from the Loan Fund to the Department of Main Roads, \$4 070 000 in 1980-81 and \$2 439 000 in 1981-82, together with amounts made available to the Forestry Commission and the Hydro-Electric Commission for roadworks.

*Receipts and Expenditure, Local Government Authorities*

Some of the expenditure appearing in the State Road Funds table consists of grants from the State Government to local government authorities, although such grants are not specifically dissected. Chapter 4, 'Local Government', contains details of: (i) grants from the State to local government authorities for road purposes; (ii) road rates collected by local government authorities; and (iii) expenditure on road construction and maintenance by local government authorities from revenue, and from loan funds.

## MOTOR VEHICLE REGISTRATIONS

### General

Statistics in this section deal with: (i) motor vehicles 'on register' at specific dates; and (ii) new motor vehicles registered within a specified period, e.g. a year.

### Definitions

**Register:** To be allowed on the public roads, motor vehicles, except those owned by the Federal Government, are required to be registered with Transport Tasmania; State Government vehicles, as well as privately-owned vehicles, are registered with this authority. Federal Government-owned vehicles, except those belonging to the defence services, are recorded on a separate Federal Government register. 'On the register', in this section, refers to both the State and Federal Government registration records, and to all motor vehicles except those of the defence services. Statistics of new motor vehicle registrations comply with the same definition.

**Vehicles Included:** The statistics cover cars, station wagons, motor cycles and commercial vehicles. Commercial vehicles as defined include utilities, panel vans, rigid and articulated trucks, other truck-type vehicles (i.e. commercial vehicles used for purposes other than freight carrying, e.g. campervans, tow trucks, ambulances and hearses) and omnibuses. Tractors, trailers and mobile plant and equipment are excluded.

Because of the multi-purpose nature of rear-door sedans it is possible for these types of vehicles to be registered as either cars or station wagons. Therefore from March 1983 motor cars and station wagons have been compiled as one group.

## Vehicles on Register

The following table has been compiled to show, in summary form, the increase in motor vehicles on the register since 1910. To give a convenient measure of this growth, vehicles on the register have been related to the population (vehicles per 1 000 persons), and increases have been expressed as annual averages for each decade.

Motor Vehicles on Register from 1910, Tasmania

<i>At 30 June</i>	<i>Cars and station wagons</i>	<i>Commercial vehicles</i>	<i>Motor cycles</i>	<i>Total</i>	<i>All vehicles Average annual increase (a)</i>	<i>Per 1 000 of population</i>
	<i>'000</i>	<i>'000</i>	<i>'000</i>	<i>'000</i>	<i>'000</i>	<i>no.</i>
1910 .....	0.2	(b)	0.2	0.4	—	2
1920 .....	2.4	(b)	1.7	4.1	0.4	20
1930 .....	12.5	2.2	4.8	19.5	1.5	89
1940 .....	17.6	5.2	3.4	26.2	0.7	109
1950 .....	25.3	12.9	4.9	43.2	1.7	156
1960 .....	63.7	26.4	3.1	93.2	5.0	271
1970 .....	118.6	32.6	3.1	154.3	6.1	398
1980 .....	177.2	47.5	4.7	229.5	7.5	r 542
1983 .....	191.0	52.5	5.8	249.3	(c) 6.6	577

(a) For decade ending in year shown. (b) Included with cars and station wagons.

(c) For three years ended 30 June 1983.

## Motor Vehicles on Register in Australia

To obtain uniform statistics for all states and territories, the Bureau has adopted the following definition of 'motor vehicles on register at a particular date': (i) vehicles whose fees were paid up at that date, in respect of that date; and (ii) vehicles whose fees were not paid up at that date but subsequently were paid retrospectively to that date (or to an earlier date); and excluding all vehicles whose fees were not subsequently paid up in respect of that particular date, even though at that date their registrations may not have been formally terminated.

The following table shows estimated details of motor vehicles on the register for each state and territory at 30 June 1983. The figures are based on the final results of the census of motor vehicles conducted in respect of 30 September 1982 and data supplied by the various registration authorities. Diplomatic and consular vehicles and all Federal Government-owned vehicles other than those belonging to the defence services are included.

Motor Vehicles on Register, 30 June 1983

<i>State or territory</i>	<i>Cars and station wagons</i>	<i>Commercial vehicles</i>	<i>Motor cycles</i>	<i>All vehicles</i>	
				<i>Total</i>	<i>Per 1 000 of population</i>
	<i>'000</i>	<i>'000</i>	<i>'000</i>	<i>'000</i>	<i>no.</i>
New South Wales .....	2 142.6	557.4	135.6	2 835.6	529.5
Victoria .....	1 796.5	381.5	79.6	2 257.7	559.6
Queensland .....	1 037.5	359.6	99.0	1 496.1	605.0
Western Australia .....	570.0	187.8	35.8	793.6	582.2
South Australia .....	593.3	132.6	37.8	763.7	569.8
Tasmania .....	191.0	52.5	5.8	249.3	576.8
Northern Territory .....	34.6	23.6	3.8	61.9	461.9
Australian Capital Territory .....	97.2	14.4	4.6	116.2	490.9
Total .....	6 462.7	1 709.5	401.9	8 574.2	557.9

### Registration of New Motor Vehicles

The motor vehicle classification system used in compiling these statistics has as its main features:

- (i) the acceptance of vehicle-type data as recorded by the registration authority;
- (ii) allocation of commercial vehicles to the categories 'utilities, panel vans' or 'rigid trucks' solely on the basis of recorded body-type;
- (iii) the inclusion in 'other truck types' of campervans, tow trucks, ambulances and hearses;
- (iv) tare groupings of motor cars and station wagons, utilities, and panel vans;
- (v) gross vehicle mass (tare plus specified carrying capacity), groupings of rigid trucks;
- (vi) gross combination mass (combined tare plus specified carrying capacity) groupings of articulated trucks.

#### Registrations of New Motor Vehicles, Tasmania

Type of vehicle	1978	1979	1980	1981	1982	1983
Motor cars .....	11 439	11 271	10 810	10 259	8 796	(a) 12 029
Station wagons .....	2 322	2 513	2 655	2 854	2 442	
Commercial-type vehicles—						
Utilities .....	1 269	1 163	1 595	1 700	1 264	1 326
Panel vans .....	1 018	840	810	974	906	884
Trucks—						
Rigid .....	1 088	894	804	471	617	891
Articulated .....	152	138	180	121	49	83
Other (b) .....	178	96	66	88	101	101
Buses .....	131	101	113	97	122	120
Motor cycles .....	789	1 039	1 157	1 286	989	1 050
Total .....	18 386	18 055	18 190	17 850	15 286	16 484

(a) Since March 1983 motor cars and station wagons have been compiled as one group because of increasing difficulties in classifying particular models.

(b) Comprises non-freight carrying vehicles (e.g. tow trucks, fire engines, campervans, ambulances and hearses).

### Scrapping of Motor Vehicles

Apart from the few 'veteran' cars owned by enthusiasts, most vehicles are eventually scrapped. No information is collected on the number scrapped each year but the following table contains information from which some inferences may be drawn:

#### New Motor Vehicles Registered and Annual Increase in Motor Vehicles on Register, Tasmania ('000)

Particulars	1978	1979	1980	1981	1982	1983
New motor vehicles registered (a) .....	18.4	18.1	18.2	17.9	15.3	16.5
Annual increase, motor vehicles on register (b) .....	7.8	7.4	r 6.0	r 6.0	r 5.2	7.2

(a) During year ended 31 December.

(b) Annual increase measured at 31 December.

In comparing the two sets of figures in the previous table, it would be wrong to assume that the difference in each year represented scrapped vehicles only: exceptions would include vehicles transferred interstate and vehicles 'on blocks'—the fact that an owner has let a registration expire does not necessarily mean that he intends to scrap his vehicle. Subject to these and similar difficulties of interpretation, it would appear that about 19 000 motor vehicles have been scrapped during the last two years.

*Registrations of New Motor Vehicles According to Make*

The table that follows gives details of Tasmanian registrations of new motor cars and station wagons and commercial vehicles according to make. It illustrates the present popularity of Ford, Holden, Toyota, Nissan, Datsun, Mitsubishi and Mazda makes which accounted for 88 per cent of all new motor vehicles of this type registered during 1983.

**Registrations of New Motor Vehicles, Tasmania 1983**  
**Classified by Predominant Make**

Make	Motor Cars and station wagons		Commercial Vehicles	
	Number	Proportion of total cars and station wagons (per cent)	Number	Proportion of total commercial vehicles (per cent)
Alfa Romeo .....	39	0.3	—	—
BMW .....	40	0.3	—	—
Daihatsu .....	101	0.8	120	3.5
Datsun .....	715	5.9	198	5.8
Fiat .....	27	0.2	—	—
Ford .....	3 005	25.0	456	13.4
Hino .....	—	—	43	1.3
Holden .....	2 882	24.0	402	11.8
Honda .....	195	1.6	16	0.5
International .....	—	—	28	0.8
Isuzu .....	—	—	130	3.8
Mazda .....	852	7.1	226	6.6
Mercedes-Benz .....	31	0.3	23	0.7
Mitsubishi .....	923	7.7	258	7.6
Nissan .....	581	4.8	165	4.8
Peugeot .....	23	0.2	—	—
Rover .....	25	0.2	—	—
Saab .....	44	0.4	—	—
Subaru .....	420	3.5	68	2.0
Suzuki .....	8	0.1	216	6.3
Toyota .....	1 996	16.6	938	27.5
Volvo .....	69	0.6	21	0.6
Other .....	53	0.4	97	2.8
Total .....	12 029	100.0	3 405	100.0

**ROAD ACCIDENTS IN TASMANIA****Scope of Statistics**

In recent years there has been increasing interest in the number of road traffic accidents and their causes and consequences. To evolve meaningful statistics describing these events, it has been found necessary to narrow the field of observation to those road traffic accidents which involve casualties, since most accidents resulting only in vehicle damage are not required by Tasmanian law to be reported to the police (the drivers might merely exchange names and report to their respective insurance companies). Further, there is the difficulty of fixing, in monetary terms, some valid standard for determining what degree of vehicle damage warrants inclusion of an accident in a long-term statistical series—obviously \$50 or \$200 for repairs in 1950 is not comparable with \$50 or \$200 for repairs now.

For these and other reasons, the statistics in this section are restricted to details of those road traffic accidents involving casualties requiring medical or surgical treatment, or causing death, and which were recorded by the police.

### Responsibility for, and Causes of, Accidents

For the purpose of the statistics in this section, the police officer reporting the accident determines, on the basis of the evidence available, the road user or agency responsible, and also the prime cause of the accident. The fact that civil or criminal courts may later make different decisions on these matters is disregarded in these statistics; nor is any attempt made to distinguish between accidents giving rise to subsequent legal action and those not doing so.

#### Causes of Accidents

Causes of accidents in Tasmania are classified, for statistical purposes, in accordance with a standard list of over 200 prime causes (although, in this section, only the most frequent causes are shown). Contributory causes and conflicting or incomplete evidence make precise classification difficult. No provision is made to record and classify such antecedent causes as fatigue, discourtesy, impatience or other driving faults. However, since July 1971 accidents where consumption of alcohol is involved have been given a special classification. Where the blood alcohol level of the road user considered responsible is 0.05 (grams of alcohol per 100 millilitres of blood) or greater, this is recorded separately and no other cause for the accident is assigned. The same practice is followed for road users who (a) were reported 'obviously affected by alcohol' and: (i) refused breath and/or blood tests; or (ii) were not tested because facilities were not readily available; or (iii) were tested with no result available; or (b) had a blood alcohol level between 0.01 and 0.04 inclusive. The double assumption in each such case is: (i) the road user's skills were impaired by alcohol; and (ii) this impairment was a factor contributing to the accident.

### Road Traffic Accident Statistics

#### Summary

The following table summarises the principal statistics of road traffic accidents involving casualties for recent years.

Road Traffic Accidents Involving Casualties, Tasmania

Period	Accidents		Persons killed		Persons injured	
	Number	Per 10 000 vehicles registered (a)	Number	Per 10 000 vehicles registered (a)	Number	Per 10 000 vehicles registered (a)
1979 .....	1 507	67	93	4.1	2 114	r 94
1980 .....	1 571	68	100	4.3	2 133	92
1981 r .....	1 629	69	111	4.7	2 273	96
1982 r .....	1 321	54	96	4.0	1 871	77
1983 .....	1 100	44	70	2.8	1 473	59

(a) Based on average number of motor vehicles on register during period. 'Vehicles on register' is defined in the earlier section headed 'Motor Vehicle Registrations'.

#### Road Users Killed or Injured

The next table analyses the type of road user killed or injured:

Type of Road User Killed or Injured, Tasmania, 1983

Types of road user involved	Killed			Injured		
	Males	Females	Persons	Males	Females	Persons
Drivers of motor vehicles .....	20	11	31	391	261	652
Drivers of motor cycles .....	10	—	10	130	10	140
Pedal cyclists .....	3	1	4	53	5	58
Passengers—						
Motor vehicle .....	12	4	16	211	265	476
Motor cycle .....	1	1	2	7	11	18
Other .....	1	—	1	—	1	1
Pedestrians .....	3	3	6	72	55	127
Other .....	—	—	—	1	—	1
Total .....	50	20	70	865	608	1 473

*Age and Sex of Road Users Killed*

The next table shows the age and sex of the various types of road user killed:

Road Traffic Accidents, Tasmania, 1983  
Age and Sex of Road Users Killed

Age group (in years)	Type of road user killed					All road users
	Drivers of motor vehicles	Drivers of motor cycles	Pedal cyclists	Passengers (all types)	Pedestrians	
Males						
Under 7 .....	—	—	—	3	1	4
7-16 .....	—	1	2	4	—	7
17-20 .....	7	3	—	2	—	12
21-29 .....	3	6	1	2	1	13
30-39 .....	3	—	—	2	1	6
40-49 .....	1	—	—	—	—	1
50-59 .....	2	—	—	—	—	2
60 and over .....	4	—	—	1	—	5
Total .....	20	10	3	14	3	50
Females						
Under 7 .....	—	—	—	1	—	1
7-16 .....	—	—	—	—	—	—
17-20 .....	1	—	—	1	—	2
21-29 .....	3	—	—	2	—	5
30-39 .....	1	—	—	—	—	1
40-49 .....	4	—	1	1	—	6
50-59 .....	1	—	—	—	—	1
60 and over .....	1	—	—	—	3	4
Total .....	11	—	1	5	3	20

*Responsibility for Road Accidents*

The next table shows the type of road user or agency believed responsible:

## Responsibility for Road Traffic Accidents, Tasmania, 1983

<i>Responsibility attributed to—</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Drivers of motor vehicles .....	746	50	1 074
Drivers of motor cycles .....	81	9	85
Pedal cyclists .....	40	3	39
Pedestrians .....	108	5	109
Passengers .....	4	—	5
Motor vehicle defects .....	23	1	31
Motor cycle defects .....	5	1	5
Animals .....	6	1	5
Road conditions .....	64	—	87
Weather .....	5	—	5
Parties not involved (a) .....	18	—	28
Total .....	1 100	70	1 473

(a) e.g. a car collides with another, after swerving to avoid a pedestrian who is not struck.

*Age and Responsibility*

Drivers of motor vehicles (excluding motor cycles) were believed responsible for 746 out of the 1 100 accidents involving casualties which were reported to the police during 1983.

Drivers under 25 accounted for 336 or 45 per cent of these accidents (male drivers under 25, 240; female drivers under 25, 96).

Casualties associated with accidents attributed to drivers under 25 were: killed, 15; injured, 522.

The following table analyses the age and sex of the drivers responsible:

Road Traffic Accidents, Tasmania, 1983  
Age and Sex of Drivers of Motor Vehicles Responsible (a)

<i>Age group of drivers responsible (in years)</i>	<i>Male driver</i>			<i>Female driver</i>		
	<i>Accidents involving casualties</i>	<i>Persons killed (b)</i>	<i>Persons injured (b)</i>	<i>Accidents involving casualties</i>	<i>Persons killed (b)</i>	<i>Persons injured (b)</i>
Under 17 .....	8	—	9	4	—	7
17-20 .....	148	12	239	63	1	100
21-24 .....	84	1	121	29	1	45
25-29 .....	59	6	89	23	5	31
30-39 .....	66	3	102	45	3	60
40-49 .....	47	1	59	19	3	21
50-59 .....	35	3	50	15	1	16
60 and over .....	67	5	87	24	3	30
Not stated (c) .....	4	2	2	2	—	2
Total .....	518	33	758	224	17	312

(a) There were four accidents (four injured), where drivers of motor vehicles were responsible but where age and sex were unknown. Totals are therefore 746 accidents (50 killed and 1 074 injured).

(b) The age groups relate to the driver who may or may not be included in the casualty figures.

(c) Includes accidents for which hit-run drivers were responsible.

*Causes of Accidents—Drivers of Motor Vehicles Responsible*

The next table analyses accidents for which drivers of motor vehicles were believed responsible:



**Road Traffic Accidents Caused by Drivers of Motor Vehicles, Tasmania 1983**  
**Classification by Cause**

<i>Principal causes of accidents for which drivers of motor vehicles (excluding motor cycles) were responsible</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Accidents involving alcohol—			
Driver's blood alcohol level 0.05 (a) or greater .....	152	10	230
Driver refused test .....	3	1	6
Other cases (b) .....	29	1	51
Other accidents—			
Excessive speed having regard to conditions .....	66	9	113
Not keeping to the left .....	36	8	57
Not giving right of way .....	90	4	116
Failing to make right-hand turn with due care .....	52	—	74
Inexperience .....	29	—	45
Inattentive driving .....	103	2	142
Failing to signal intention of turning or stopping .....	8	—	13
Improper overtaking .....	16	7	25
Infirmity of driver .....	8	—	12
Driver asleep or drowsy .....	26	5	28
Pulling out from kerb without warning .....	11	2	14
Failing to observe traffic sign or signal .....	92	1	121
Hit-run (n.e.i.) .....	4	—	4
Other causes (including not stated or not known) .....	21	—	23
<b>Total .....</b>	<b>746</b>	<b>50</b>	<b>1 074</b>

(a) Grams of alcohol per 100 millilitres of blood.

(b) Driver responsible (i) reported 'obviously affected by alcohol' and either was not tested or was tested with no result available; or (ii) had a blood alcohol level between 0.01 and 0.04 inclusive.

**Alcohol-factor Accidents, Drivers of Motor Vehicles Responsible**

The following table shows the numbers of drivers of motor vehicles (excluding motor cycles) believed responsible for casualty accidents in which alcohol was a possible prime or antecedant cause, classified by blood alcohol level and age group:

**Road Traffic Accidents Involving Alcohol, Drivers of Motor Vehicles Responsible, Tasmania, 1983**  
**According to Blood Alcohol Level and Age Group**

<i>Blood alcohol level (a)</i>	<i>Age group of drivers responsible (in years)</i>							<i>Total</i>
	<i>Under 21</i>	<i>21-24</i>	<i>25-29</i>	<i>30-39</i>	<i>40-49</i>	<i>50-59</i>	<i>60 and over</i>	
Less than 0.05 .....	7	3	1	1	1	—	2	15
0.05 .....	4	4	1	1	—	1	—	11
0.06 .....	3	2	1	1	—	—	—	7
0.07 .....	6	4	—	2	1	—	—	13
0.08 .....	3	2	—	—	—	—	—	5
0.09 or 0.10 .....	8	8	2	3	2	1	—	24
0.11 or 0.12 .....	9	9	4	5	1	—	1	29
0.13 or 0.14 .....	9	1	3	2	1	1	—	17
0.15 or 0.16 .....	4	3	3	8	1	1	—	20
0.17 or 0.18 .....	1	2	1	2	1	2	1	10
0.19 or 0.20 .....	3	1	1	1	1	—	—	7
0.21-0.24 .....	—	2	—	2	—	—	—	4
0.25 or above .....	—	—	1	3	1	—	—	5
Refused test .....	—	—	3	—	—	—	—	3
Test facilities not available .....	6	4	1	—	1	—	—	12
Tested but no result available .....	1	—	—	1	—	—	—	2
<b>Total .....</b>	<b>64</b>	<b>45</b>	<b>22</b>	<b>32</b>	<b>11</b>	<b>6</b>	<b>4</b>	<b>184</b>

(a) Grams of alcohol per 100 millilitres of blood.

*Causes of Accidents—Motor Cycle Drivers Responsible*

The table below analyses road traffic accidents for which motor cycle drivers were held responsible:

**Road Traffic Accidents, Motor Cycle Drivers Responsible, Tasmania, 1983**  
Classification by Cause

<i>Principle causes of accidents for which drivers of motor cycles were responsible</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Accidents involving alcohol—			
Driver's blood alcohol level 0.05 (a) or greater .....	11	3	11
Other cases (b) .....	4	1	4
Other accidents—			
Excessive speed .....	18	3	18
Not keeping left .....	10	—	12
Failing to give right of way .....	3	1	2
Inexperience .....	6	1	5
Inattentive driving .....	14	—	18
Other .....	15	—	15
Total .....	81	9	85

(a) Grams of alcohol per 100 millilitres of blood.

(b) Driver responsible (i) reported 'obviously affected by alcohol' but not tested because facilities not readily available, or (ii) had a blood alcohol level between 0.01 and 0.04 inclusive.

*Causes of Accidents—Pedestrians Responsible*

The table below analyses road traffic accidents for which pedestrians were held responsible:

**Road Traffic Accidents, Pedestrians Responsible, Tasmania, 1983**  
Classification by Cause

<i>Principal causes of accidents for which pedestrians were responsible</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Accidents involving alcohol—			
Pedestrian's blood alcohol level 0.05 (a) or greater .....	1	1	—
Other cases (b) .....	6	—	6
Other accidents—			
Walking across roadway without due care .....	47	3	48
Passing behind or in front of moving or stationary vehicle or object .....	6	—	6
Children (under seven years of age) not under, or breaking away from, the supervision of an older person .....	5	—	5
Running across roadway .....	40	1	41
Stepping off kerb without due care .....	3	—	3
Total .....	108	5	109

(a) Grams of alcohol per 100 millilitres of blood.

(b) Pedestrian responsible (i) reported 'obviously affected by alcohol' by police but not tested because facilities not readily available, or (ii) had a blood alcohol level between 0.01 and 0.04 inclusive.

*Location of Accidents*

The next table shows the location of accidents in the State:

## Road Traffic Accidents and Casualties by Local Government Area, 1983

<i>Local government area</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Hobart .....	167	4	211
Launceston .....	104	1	134
Glenorchy .....	94	3	121
Clarence .....	75	6	104
Burnie .....	40	2	50
Devonport .....	78	1	112
Other .....	542	53	741
Tasmania .....	1 100	70	1 473

## Road Features and Accidents

The following table analyses all accidents involving casualties according to road features at the site and shows that, in 1983, 33 per cent of accidents occurred on a straight section of road:

## Features of Roadways on Which Accidents Occurred, Tasmania, 1983

<i>Feature of roadway</i>	<i>Accidents involving casualties</i>		<i>Persons killed</i>	<i>Persons injured</i>
	<i>Number</i>	<i>Per cent of total</i>		
At intersections—				
Cross .....	209	19.0	3	266
'T' .....	144	13.1	6	193
Roundabout .....	3	0.3	—	8
Other .....	30	2.7	2	34
Other than at intersections—				
Straight road .....	363	33.0	27	453
Bend or curve .....	307	27.9	29	464
Bridge, culvert or causeway .....	11	1.0	—	19
Railway level crossing .....	3	0.3	2	3
Other .....	30	2.7	1	33
Total .....	1 100	100.0	70	1 473

## Types of Accidents

Most accidents arise from collisions between vehicles, followed by accidents in which vehicles collide with fixed objects, as shown in the following analysis:

## Types of Accidents, Tasmania, 1983

<i>Type of accidents</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Collisions—			
Angle .....	356	16	480
Rear end .....	97	4	122
Head on .....	68	15	124
Side swipe—Same direction .....	29	1	36
Side swipe—Opposite direction .....	13	3	25
Other .....	34	1	40

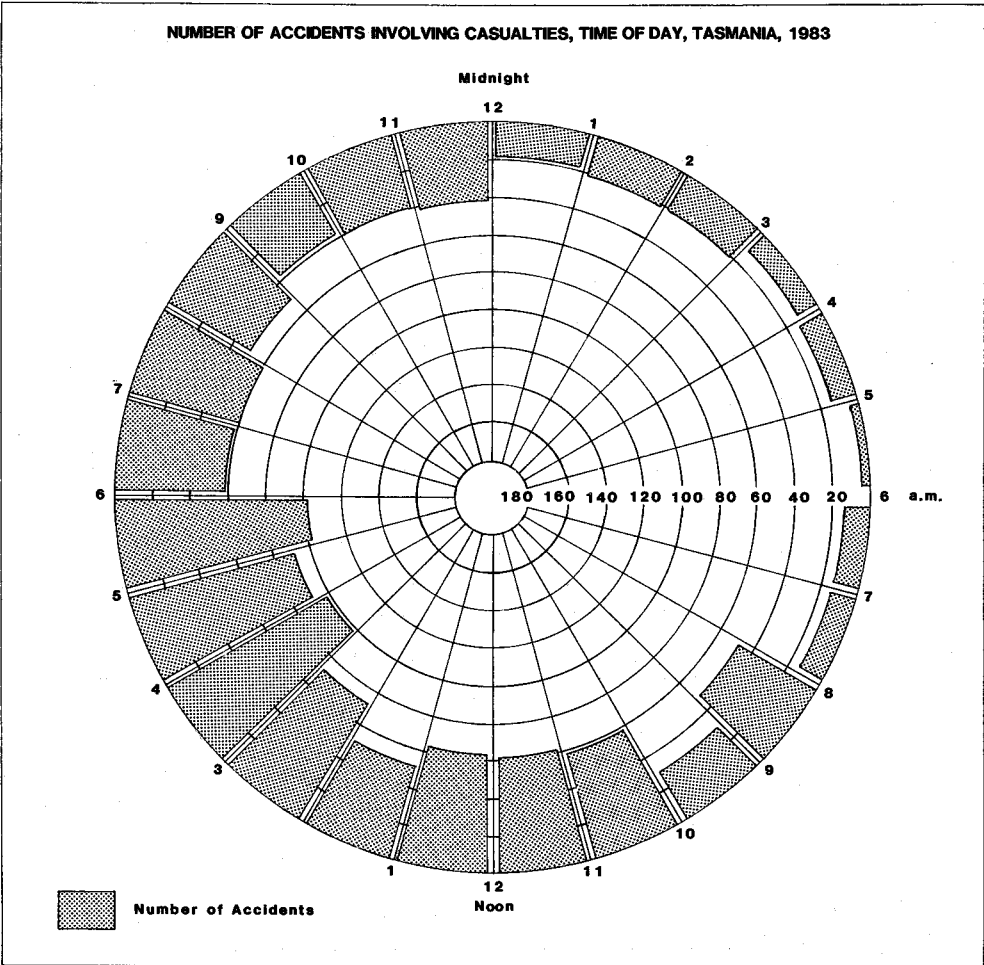
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Types of Accidents, Tasmania, 1983—continued

Type of accidents	Accidents involving casualties	Persons killed	Persons injured
Vehicle—			
Overtaking or leaving road .....	111	6	160
Colliding with fixed object .....	239	16	331
Colliding with animal .....	5	1	4
Colliding with pedestrian .....	130	6	130
Passenger accidents .....	4	—	5
Other types .....	13	1	13
Other accidents .....	1	—	3
Total .....	1 100	70	1 473

Time of Day When Accidents Occurred

The following diagram shows the time of day when accidents involving casualties occurred during 1983:



*Days of the Week on Which Accidents Occurred*

The following table shows accidents and casualties according to the day of the week on which they occurred:

**Road Traffic Accidents, Tasmania, 1983**  
Days of the Week on Which Accidents Occurred

Day of the week	Accidents involving casualties	Persons killed	Persons injured
Monday .....	111	6	143
Tuesday .....	132	17	169
Wednesday .....	146	10	189
Thursday .....	173	6	224
Friday .....	181	10	253
Saturday .....	190	10	244
Sunday .....	167	11	251
Total .....	1 100	70	1 473

*Drivers Involved in Accidents, Age Group and Licence Type*

During 1983 a total of 1 467 drivers of motor vehicles (excluding motor cycles) were involved in casualty accidents which were reported to the police. Of these, 25 per cent (361) were under 21 years of age and a further 29 per cent (421) were from 21 to 29 years of age.

The age group and type of driving licence held by these drivers at the time of the accident are shown in the next table:

**Road Traffic Accidents, Drivers of Motor Vehicles Involved, Tasmania, 1983**  
According to Licence Type and Age Group

Type of driving licence	Age group of drivers involved (in years)								Total drivers involved
	Under 21	21-24	25-29	30-39	40-49	50-59	60 and over	Not stated	
Learner .....	16	2	—	—	—	—	—	—	18
Provisional .....	115	18	4	4	1	—	1	—	143
Ordinary .....	186	189	160	230	138	102	115	7	1 127
Interstate or international .....	2	5	3	5	3	1	6	—	25
No licence .....	24	11	7	5	1	2	—	—	50
Not known/not applicable .....	18	8	14	19	10	5	13	17	104
Total .....	361	233	188	263	153	110	135	24	1 467

**No-Fault Third Party Insurance**

'No-fault' third party insurance was introduced in Tasmania on 1 December 1974 under the *Motor Accidents (Liabilities and Compensation) Act* 1973. Prior to the introduction of the 'no-fault' scheme, motorists were compelled to insure with insurance companies against claims for personal injury by other persons resulting from motor vehicle accidents. The success of a claim was dependent upon the claimant proving negligence (or fault) on the part of the driver of a motor vehicle. 'No-fault' insurance, however, entitles a person to compensation for injuries sustained in a motor vehicle accident without regard to who was at fault. The extent of the compensation is determined by the scheduled benefits outlined in the Act. The operation of the scheme does not, however, preclude the individual from suing for damages should it be felt that the scheduled benefits are insufficient compensation and that the accident was the result of negligence. Insurance is compulsory under the Act.

### *Premiums*

Premiums vary according to the type of vehicle and the purpose for which it is used and are payable with vehicle registration fees. On 1 December 1983, the annual premium for most private passenger-type motor vehicles was \$104.00. Premiums are subject to review annually.

### *Scheduled Benefits*

The more important of the scheduled benefits prescribed in the Act are:

- (i) medical, hospital and ambulance expenses;
- (ii) disability allowances for employed persons, self-employed persons or housekeeping;
- (iii) dependant's allowance;
- (iv) death benefits;
- (v) funeral benefits.

### *Motor Accidents Insurance Board*

The Motor Accidents Insurance Board, set up to administer the Act, consists of five members who are appointed by the Governor. The chairman, a legal practitioner, is appointed directly and each of the following organisations recommends one member: (i) the Tasmanian Government Insurance Board; (ii) the Tasmanian branch of the Insurance Council of Australia; (iii) Transport Tasmania; and (iv) the Royal Automobile Club of Tasmania (representing the interests of motor vehicle users).

## AIR TRANSPORT IN TASMANIA

### **Introduction**

1983 saw the introduction of pure jet services between, Hobart-Sydney, Devonport-Sydney and Devonport-Melbourne with Fokker F28 aircraft of East-West Airlines and Air New South Wales. Air New Zealand entered the Hobart-Christchurch route. Trans Australia Airlines continued to operate between Hobart-Christchurch under arrangements with Qantas. Airlines of Tasmania Pty Ltd became the sole intrastate commuter operator. Devonport became Tasmania's third airport with scheduled jet services. Federal Government provided approximately \$4.8 million in air service subsidies for air travel on the Tasmania-Melbourne airline route.

During 1983 Ansett Airlines of Australia, Trans Australia Airlines and East-West Airlines continued to provide the greater percentage of passenger traffic to and from the Tasmanian mainland. East-West Airlines took over all Trans Australia Airlines Fokker F27 routes to Tasmania on 3 February 1983.

Air freight is carried regularly between Melbourne and the major Tasmanian airports and islands, not only in the belly lockers of the regular domestic airlines, but also in a variety of aircraft including Lockheed Electras and Boeing 727 of Ansett Airlines of Australia and the DC9 of IPEC. Smaller aircraft also carry a large amount of freight across Bass Strait and to the Tasmanian islands.

### **Administration**

#### *Administration of the Air Navigation Act and Regulations in Tasmania*

The *Federal Air Navigation Act* 1920 and associated regulations are administered for Tasmania by the Regional Director, Department of Aviation, Victoria-Tasmania Region. Regulation of aircraft and commercial operations within Tasmania is administered through Transport Tasmania under authority of the *Traffic Act* 1925. The Federal Department's more important functions include the provision and maintenance of government aerodromes and associated facilities, the licensing of aircraft operators and pilots and a responsibility for supervising all aspects of air safety.

### *Classification of Flying Activities*

Flying activities are classified by regulation into the following well-defined categories:

- (i) *Private Operations*: Being operations in which an aircraft is used for personal transportation—private or business, aerial work for which no form of remuneration is received, carriage of persons or goods for other than hire or reward, or the carriage of goods other than for the purposes of trade.
- (ii) *Aerial Work Operations*: These operations refer to the aircraft being used for aerial survey; spotting; photography; agriculture; advertising; flying training and the cartage of goods being the property of the pilot, owner or hirer of the aircraft for purposes of trade. Within Tasmania there are five licensed flying training organisations and two aerial agricultural organisations carrying out most of the aerial work activities. Other types of aerial work are carried out by a further nine operators.
- (iii) *Charter Operations*: These refer to aircraft hired for passenger or cargo movement, not between fixed terminals or to fixed schedules. There are 15 licensed charter operators based in Tasmania.
- (iv) *Computer Operations*: These are regular public transport operations conducted in accordance with fixed schedules between fixed terminals. Operators are authorised to operate under supplementary airline licences. Services of this kind are provided to Tasmania by Airlines of Tasmania Pty Ltd, Phillip Island Air Charter and Kendell Airlines.
- (v) *Regular Public Transport*: This refers to aircraft operating under an airline licensed to carry passengers and cargo according to fixed schedules and on specified routes. All services of this kind are provided to Tasmania by Ansett Airlines, East-West Airlines and Trans Australia Airlines.

### **Tasmanian Aerodromes**

The major aerodromes in Tasmania are owned and operated by the Federal Government through the Department of Aviation. The following sections describe both Federal Government-owned and other aerodromes in Tasmania.

#### *Federal Government-owned Aerodromes*

*Hobart Airport*: Ranks eighth in the volume of passengers handled at Australian terminals. It was completed in 1956. Extension and strengthening of the runway, taxiway and aprons to take DC9 and Boeing 727 aircraft in full weight was completed in 1966. International operations to Christchurch, New Zealand, commenced during November 1980, with Ansett Airlines (ceased operations on 3 March 1982) and Trans Australia Airlines operating on behalf of Qantas. The airport is equipped with complex aviation aids. A new terminal and communication buildings were completed in 1976. A new international terminal was opened in 1983. It lies 18 kilometres by road from the city.

*Launceston Airport*: 16 kilometres south-east of Launceston, it ranks after Hobart in passenger volume but handles considerably more freight; it is the main terminal for the Ipec DC9 freighter. The area control centre provides air traffic control for Tasmania via repeater stations, south on Mount Wellington and north on Mount Barrow. The airport is also used for commuter operations, flying training, light aircraft charter and aerial work operations. It also caters for a commuter service from Phillip Island (Vic.) operated by Phillip Island Air Charter.

*Wynyard Airport*: This has one sealed runway of 1 341 metres and one 1 189 metres long for regular public transport operations, charter, aerial work and private operations. It has been upgraded to handle F27 aircraft and is currently being evaluated for jet operations. It also caters for a commuter service from Phillip Island (Vic.) operated by Phillip Island Air Charter.

*King Island Airport*: Located six kilometres north-east of Currie. It has three gravel runways, night lighting and radio navigational equipment. It caters for commuter services

operated by Airlines of Tasmania Pty Ltd and Kendell Airlines, as well as charter and private aircraft operations.

*Flinders Island Airport:* Located five kilometres north of Whitemark. There are two gravel and one grass landing strips plus an apron, taxiway, terminal and navigation aid facilities. Main services being commuter and charter operations.

*Cambridge Airport:* this was constructed during the early period of aviation and has four runways. The proximity of hills prevent further development and after completion of the Hobart Airport, Cambridge became a centre for light aircraft activities.

#### *Locally Owned Aerodromes*

*Devonport Airport:* Located 6 kilometres east of Devonport, it is owned by the Port of Devonport Authority under the Commonwealth Airport Local Ownership Plan. Originally constructed in the early 1930s, it was developed to handle DC3, DC4 and Viscount aircraft in 1950. 1982 saw the commencement of work to bring the airport up to DC9-F28 jet standard which was completed in October 1983 at a cost of \$6.5 million. Regular F27 passenger services of Ansett and East-West, commuter services of Airlines of Tasmania Pty Ltd together with aerial work, flying training, charter and private aircraft operations are carried on from this location.

*Smithton Airport:* Located three kilometres west of Smithton, it is owned by Transport Tasmania. It has a sealed main runway plus lesser gravel strips and is used for regular commuter services as well as itinerant charter and private operations.

*St Helens Airport:* The aerodrome is owned and operated by the Municipality of Portland. A grassed strip 1 189 metres long and 91 metres wide is of sufficient dimension to permit operations by DC3 and F27 type aircraft. The aerodrome currently serves the charter, aerial work and private operation requirements for the area and has a non-directional beacon for instrument navigation.

*Queenstown Airport:* The Municipality of Queenstown under the local ownership plan provided an authorised landing area for light aircraft in 1937. In 1963 work commenced on the construction of a runway suitable for the operation of DC3-type aircraft, which was opened on 17 April 1966. It is served by regular commuters of Airlines of Tasmania Pty Ltd.

*Strahan Airport:* This airport, together with Queenstown Airport, services the West Coast of Tasmania. Opened for regular public transport operations in 1964, Strahan aerodrome was constructed under the aerodrome local ownership plan and is owned by the Municipality of Strahan.

#### **Aircraft, Passenger and Freight Movements**

The following table shows the number of scheduled aircraft movements at the principal airports in Tasmania during recent years. For the purposes of the statistics in this table a take-off is regarded as one movement and a landing as another.

**Aircraft Movements: Principal Airports**

<i>Year</i>	<i>Hobart</i>	<i>Launceston</i>	<i>Devonport</i>	<i>Wynyard</i>	<i>King Island</i>
1977 .....	8 073	10 265	3 944	4 006	707
1978 .....	8 832	11 313	4 190	4 645	737
1979 .....	8 555	11 550	3 856	4 367	713
1980 .....	8 565	11 092	4 399	5 112	581
1981 .....	8 742	10 879	3 904	4 928	(a)
1982 .....	8 351	11 589	4 781	5 793	(a)

(a) Regular public transport operated by Ansett Airlines of Australia ceased from 6 November 1980.

The next table shows the volume of passengers and freight handled at each airport; the following definitions apply:

*Passengers:* The figures are for fare-paying passengers only at each airport and are the sum of embarkations and disembarkations.



*Freight:* The figures are the sum of all revenue freight (including excess baggage) loaded and unloaded at each airport.

**Passenger and Freight Movements: Principal Airports (a)**

<i>Year</i>	<i>Hobart</i>	<i>Launceston</i>	<i>Devonport</i>	<i>Wynyard</i>	<i>King Island</i>
<i>Passengers ('000)</i>					
1977 .....	411	326	83	83	13
1978 .....	448	367	81	86	15
1979 .....	464	386	82	87	14
1980 .....	479	390	91	90	10
1981 .....	470	376	77	83	(b)
1982 .....	458	376	78	75	(b)
<i>Freight (Tonnes)</i>					
1977 .....	8 575	14 964	355	331	118
1978 .....	9 588	16 794	399	380	117
1979 .....	9 685	20 785	373	376	229
1980 .....	9 726	21 512	321	359	155
1981 .....	11 716	22 710	264	338	(b)
1982 .....	10 124	34 203	184	191	(b)

(a) See definitions preceding this table.

(b) Regular public transport operated by Ansett Airlines of Australia ceased from 6 November 1980.

The decrease in the total number of passengers carried by the principal airports (as shown in the above table) in 1982 over 1981 was two per cent. The total freight carried showed an increase of 28 per cent over the same period.

*Comparison of Principal Australian Airports*

The next table shows the volume of activity at the principal Australian airports in terms of the number of passengers, freight and aircraft movements. Details of international services have been excluded so that comparisons are purely in terms of domestic traffic (international services are centred on Melbourne, Sydney, Brisbane and Perth).

**Passengers, Freight and Aircraft Movements  
Principal Airports, Australia 1982**

<i>Airport</i>	<i>Passengers</i>	<i>Freight (tonnes)</i>	<i>Aircraft movements</i>
Sydney .....	5 685 313	59 775	75 030
Melbourne .....	4 830 846	72 678	61 102
Brisbane .....	2 704 395	30 003	36 028
Adelaide .....	1 765 266	14 770	23 051
Perth .....	1 027 536	14 167	15 227
Canberra .....	808 210	2 794	11 612
Coolangatta .....	597 917	1 334	8 549
Hobart .....	458 283	10 124	8 351
Launceston .....	375 822	34 203	11 589

**FREIGHT EQUALISATION**

In April 1974, Mr J. F. Nimmo was appointed by the Federal Government as a Commissioner of a 'Commission of Inquiry into Transport to and from Tasmania'. The Commission was appointed because of the widely held view that Tasmania suffered a considerable disability with regard to freight and passenger rates to and from mainland Australia compared to other states.

The Commission's Report (the 'Nimmo Report') was presented to the Government in March 1976. A summary of the Report is included in the 1977 *Year Book*. Following release of the report, the Federal Minister for Transport, on 9 June 1976, announced

details of a scheme to be administered by the Tasmanian Branch of his Department for equalising the trans Bass Strait freight costs of Tasmanian manufacturers and producers who exported goods for use or sale on the mainland.

Under the scheme, consignors of interstate goods from Tasmania are paid assistance which is intended to compensate them for the excess transport charges they incur. A separate rate of assistance is calculated for each common item of freight for each major route between Tasmania and interstate destinations. The amount of assistance is calculated as the difference in cost for door-to-door transport of the item between Tasmania and the mainland and that for transporting it over a comparable route on the mainland.

Payment of assistance is made to the actual consignor of the goods, leaving him free to choose the shipping line which provides the service best suited to his needs.

The TFES does not cover all consignments from Tasmania and three major categories of freight do not receive assistance payments:

- (i) bulk cargoes were excluded from the scheme because they were found not to be disadvantaged relative to similar movements on the mainland.
- (ii) air cargo is not included because the Government considered that assistance would create inequities for manufacturers in comparable circumstances on the mainland.

On 6 April 1982 the Federal Minister for transport announced that in the event of industrial disputes resulting in no shipping being available between Tasmania and the Mainland, the amount of subsidy payable to consignors of sea freight under the Tasmanian Freight Equalisation Scheme will be payable to consignors in respect of air freight for those goods, northbound and southbound, that would otherwise have travelled by sea.

- (iii) overseas cargoes were not included because many overseas shipping lines paid the centralisation cost of moving containers between Tasmania and the mainland. As such arrangements do not apply to some areas of the mainland the Government felt that TFES assistance to exports would be discriminating in Tasmania's favour. However, in its 1978 Report, the BTE recommended that further consideration be given to this matter.

Associated with the introduction of freight equalisation assistance sea freight rates were restored to economic levels. This involved increases to north-bound freight rates which had been frozen since 1974 and a lesser increase in south-bound rates. TFES rates of assistance were calculated on the basis of economic freight rates being charged.

Assistance in respect of south-bound goods and equipment for Tasmanian manufacturers and producers was announced in November 1977 and made retrospective to 1 July 1976. The goods eligible for south-bound assistance must be of Australian origin and suffer an actual freight cost disability. Eligible producers are: (i) primary producers in respect of equipment and packing materials; and (ii) manufacturers and mining undertakings in respect of equipment used in the production process and raw materials input, provided that these total more than five per cent of the factory door cost of the finished product.

At the direction of the Federal Minister for Transport, the Bureau of Transport Economics re-assessed the freight disability for north-bound goods in late 1977. In recalculating the rates of assistance, the Bureau generally followed the methodology used by the Nimmo Inquiry but changed one significant aspect. While Nimmo determined rates of assistance by a comparison of the average transport costs for Tasmanian consignors for each commodity with that of their mainland counterparts, the BTE based the level of assistance on a comparison between the costs of the most efficient consignors in order to encourage efficiency. The Minister released the Bureau's report and announced new rates of assistance on 16 July 1978 which were retrospective to 1 July 1978.

In addition to recalculating rates of assistance, the Bureau introduced some small changes in the format of the Schedule of Rates in order to facilitate the preparation and payment of claims. Some commodity groups were split into two classifications to enable more exact compensation to be made and items with similar transport characteristics were grouped together to facilitate the introduction of new commodities into TFES in the future. The unit of measurement on which assistance payments are based was changed from cubic metres (shipping space) to tonnes weight for a large proportion of commodity classifications.

The Bureau reviewed south-bound rates of assistance and north-bound rates for timber and livestock during 1979. The rates for sheep and cattle, and for timber, were split into sub-classifications to allow more accurate calculation of freight equalisation rates. The Minister released the Bureau's report and announced new rates on 27 February 1980. The new rates were effective from 1 March 1980, with the exception of those for north-bound timber which were effective from 1 January 1980.

In 1980, the Bureau of Transport Economics began a review of the methodology used to calculate assistance rates as part of an overall review of the Scheme which is being undertaken by the Commonwealth Department of Transport.

In June 1980 the Federal Minister for Transport released a report by the Bureau of Transport Economics which outlined an alternative method of calculating TFES subsidies which may overcome some of the problems with the current method. The report, "Tasmanian Freight Equalisation Scheme: a 'Landbridge' Approach to the Estimation of Subsidy Rates" was considered as a discussion paper only and submissions were invited from Tasmanian industry indicating their views on it. The report was not implemented as policy.

Freight Equalisation payments in 1981-82 totalled \$29 420 733, comprising 94 per cent paid to north-bound freight claimants and six per cent paid to south-bound claimants.

## POSTAL AND TELECOMMUNICATIONS SERVICES

### Introduction

Prior to 1 July 1975 the Postmaster-General's Department provided and controlled postal and telecommunications services in Tasmania, supported by engineering, finance and accounting, supply, personnel and administrative establishments. From 1 July 1975 control of these services has been vested in the Australian Postal Commission (Australia Post), the Australian Telecommunications Commission (Telecom) and the Telecommunications Department (now Department of Communications). The activities of these bodies in Tasmania are outlined below.

### Australia Post

Apart from its obvious role of providing postal services, Australia Post also acts as an agent for a number of other instrumentalities in transactions which include: Commonwealth Savings Bank deposits and withdrawals; Telecom Australia account payments; telegrams; Defence Service Home repayments; sale of State duty stamps; sale of income taxation instalment stamps; Medicare; State Division of Housing repayments; State Taxation branch land tax repayments; Department of Foreign Affairs, passport applications and citizenship interviews and Australian Government bonds.

#### *The Postal Service*

The first long-distance overland mail service in Australia was started between Hobart and Launceston in 1816, the carrier walking both ways and taking a fortnight for the round trip.

The number of individual postal articles handled in Tasmania in 1982-83 amounted to 56.2 million compared to 57.9 million in 1981-82. Australia Post handled 2 943 million articles throughout Australia in 1982-83 compared to 2 876 million in the previous year.

All mail to and from Tasmania and the Mainland is carried by air as far as Melbourne, priority being given to priority paid mail, standard articles and mail on which airmail fees have been paid. The balance is forwarded on an 'Air Opportunity' basis. A priority paid mail service provides guaranteed delivery within Hobart and suburbs on the next working day. This service is also available between Hobart, Launceston, Devonport and Burnie. The service also extends interstate and to selected overseas countries. An overnight parcel service provides for next working day delivery of all mail throughout the State, with only minor exceptions.

### *Courier Services*

Australia Post also provides an express courier service for urgent items in Hobart with an intrastate network extending to Launceston, Devonport, Ulverstone, Burnie and many country areas and an interstate network, which includes all State capitals and major provincial centres. In addition, a high speed document transmission service called 'Intelpost' is available. The service operates between a network of intrastate and interstate post offices and covers items such as letters, documents, graphics and alphabets of any language. A two hour guaranteed delivery service is an integral part of the facility.

At 30 June 1983 Australia Post had a full-time staff in Tasmania of 714; 89 persons were employed part-time, 219 were employed at non-official post offices (and paid on the basis of the volume of business transacted) and 157 had mail service contracts with Australia Post. There were 505 street posting boxes in the State and 146 street delivery rounds were in operation.

**Postal Services, Tasmania**

<i>Particulars</i>	<i>Unit</i>	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Post Offices—							
Official .....	no.	42	42	42	42	41	41
Non-Official .....	no.	215	207	244	196	194	195
Postal traffic (a)—							
Standard letters .....	'000	48 690	51 828	53 902	57 204	51 503	49 603
Non-standard							
articles .....	'000	7 569	12 252	10 962	6 628	5 773	5 986
Parcels .....	'000	342	379	444	544	543	548
Registered articles ....	'000	124	121	119	127	125	116
Total .....	'000	56 725	64 580	65 427	64 503	57 944	56 253

(a) Number of separate articles handled.

### **Australian Telecommunications Commission (Telecom Australia)**

#### *Development of Telecommunications*

Hobart and Launceston were linked by a telegraph line in 1857 and two years later a Bass Strait cable was in operation, only to fail in 1861. By 1869 a second cable was laid and communication with overseas countries became possible in 1872 when the Overland Telegraph was established between Adelaide and Darwin.

The first telephone line in Tasmania linked Hobart and Mt Nelson signal station in 1880, both Hobart and Launceston having exchanges by 1883. However, no link with Victoria or overseas countries was provided until 1936.

The State is now served with a network of high-capacity, high-quality trunk channels which are extended to other Australian States and linked with the Seacom and Compac cables connecting Australia to overseas countries. There are also links to the Overseas Telecommunications Commission earth satellite stations at Carnarvon, Ceduna and Moree. The State is divided into three districts (which coincide with the STD area code districts), each in the charge of a District Telecommunications Manager.

**Telegraph:** The teleprinter exchange (TELEX) had only one Tasmanian subscriber in 1957 but 1 017 were connected by 15 June 1983. The TELEX service is fully automatic and subscribers can now contact each other without an exchange operator's assistance. Calls can be made automatically to many overseas countries tied in with Australian telegraphic services, while the remainder can be contacted through an exchange operator. Extensive use is made of the long established picturegram service by the press; organisations such as the Bureau of Meteorology and private companies have a similar service available for the transmission of charts and documents.

**Telephones:** The Commission completed the conversion to automatic working of all the telephone exchanges in Tasmania on 15 June 1977. There were then 198 automatic exchanges in the State. Tasmania became the first Australian State to have a fully automatic telephone system.

### *Telephone and Telegraph Services*

The following table analyses telephone and telegraph services in Tasmania:

Telecommunications Services, Tasmania							
Particulars	Unit	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<b>Telephone—</b>							
Services in operation (a)—							
Business .....	'000	36	36	35	36	37	37
Non-business .....	'000	75	81	88	96	102	108
Total .....	'000	111	117	124	132	138	145
Public telephones .....	'000	1	1	1	1	1	1
Instruments in operation (a) .	'000	155	164	174	202	192	212
Automatic exchanges (a) .....	no.	197	196	196	197	197	197
Manual exchanges (a) .....	no.	—	—	—	—	—	—
Value of calls made—							
Metered (local and STD) .	\$'000	24 748	28 207	34 083	36 800	36 071	43 865
Trunk .....	\$'000	2 175	2 519	3 046	3 800	3 292	3 449
Public telephone (local and trunk) .....	\$'000	1 271	1 466	1 670	1 950	1 890	2 334
<b>Telegraph—</b>							
Phonograms lodged .....	'000	143	104	81	73	64	56
All telegrams lodged (b) ...	'000	242	178	135	122	107	91

(a) At 30 June.

(b) Includes telegrams lodged by telephone (i.e. phonograms.)

The installation in recent years, of the high-capacity trunk channels, known as the Broadband system, together with modern trunk switching exchanges, has enabled the Commission to provide Subscriber Trunk Dialling (STD) facilities for the direct dialling of trunk calls. This facility enables subscribers to make direct long-distance calls to anywhere in Australia by simply dialling the required number. All telephone subscribers in Tasmania have access to STD which avoids the delays associated with manually-operated exchanges. Charges are based on actual time used and there is no minimum time period as with manually booked trunk calls.

International Subscriber Dialling (ISD) to more than 140 countries is now available upon request to 108 421 telephone subscribers throughout the State. At 15 June 1983, 44 781 subscribers have availed themselves of this facility.

There is an ever-increasing demand for facilities to provide rapid communications between computers and remote data terminals, over telecommunications links.

The Datel Service was introduced in 1969 to service this requirement. It includes a connecting link which is either a dedicated private line or switched network service, together with a modulator/demodulator (modem) required at each terminal location to translate the data into a form suitable for transmission through the Telecom network. At 30 March 1984, 2 300 modems were in service in Tasmania.

As the need for data communications in linking offices located throughout Australia and around the world becomes more vital, Telecom Australia's involvement in data

communications has grown rapidly. In recognition of this need, Telecom now offers in addition to the Datal Service:

- (i) The Digital Data Service (DDS), a leased line digital transmission service ideally suited for longer distance high volume data communication and
- (ii) Austpac, a switched data facility tailored to cater for low volume, long distance transmission to a variety of data bases.

The 'Telefinder Radio Paging Service', which commenced in Hobart on 14 November 1977 and in Launceston on 19 February 1979 provides a point to point contact facility whereby a Telefinder subscriber carries a lightweight pocket receiver which emits an audible 'Beep' when it receives a signal broadcast from a paging radio transmitter. The alerted customer then takes some pre-arranged course of action such as contacting his office to receive information. At 15 June 1983, 1 148 paging units were in operation in the State.

## DEPARTMENT OF COMMUNICATIONS

### Use and Management of the Radio-frequency Spectrum in Tasmania

#### *History*

Before 1895, scientists in England, Germany and Russia had proved the existence of electromagnetic waves (or radio waves). In that year, Guglielmo Marconi discovered the means to transmit and receive these waves and thus, by means of the morse code, was able to exchange messages over distance and the history of wireless (later radio) began.

It is worthy of note, that Tasmania was to the fore in early radio experimentation. During the visit of the Duke and Duchess of Cornwall and York in the vessel RMS 'Ophir' in July 1901 the Longbeach lightstation at Sandy Bay, (Hobart) communicated with the naval escort vessels *St. George* and *Juno* thus establishing the first marine radiocommunication in Australia.

The initial step towards inaugurating wireless telegraphy as an official communication medium was taken with the passing of the *Wireless Telegraphy Act* in 1905 which, with amendments, is still the cornerstone of radio-frequency management. A new act of Parliament, the *Radiocommunication Act* (1983) has received royal assent but is yet to be proclaimed.

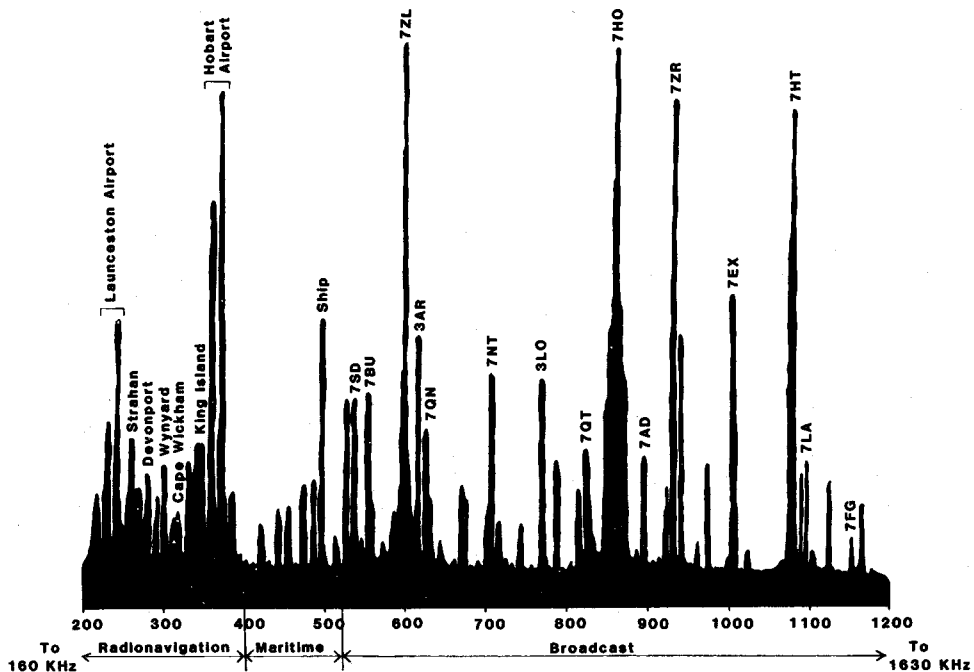
The first fixed land station in Australia licenced by the PMG's Department (7 June 1906) was located at East Devonport, Tasmania. It was owned and operated by the Marconi Wireless Company and was used to communicate with a similar station later established at Point Lonsdale, Victoria. On 12 July 1906, when both stations were fully operational, the Governor-General of the day sent the first Australian official wireless telegram to the Governor of Tasmania: 'The Commonwealth greets Tasmania and rejoices at the establishment of new means for knitting the people of Australia more closely together—Northcote.'

The most sanguine of the early developers could hardly have hoped that within some 78 years the new medium would advance so rapidly; neither could they have envisaged that the radio environment within the same span of years would encompass such activities as television, which makes extensive use of radio techniques, and radio astronomy by means of which modern scientists are probing the uttermost secrets of space.

#### *Radio Frequency Spectrum*

Everyone on this planet is immersed in a sea of electromagnetic radiations vibrating at rates ranging from those of the penetrating cosmic and X-rays at the highest, down through light and heat to beyond the very low radio frequencies used to guide submarines in the remote depths of the oceans.

The radio-frequency spectrum is but a part of the total electromagnetic spectrum and is considered to be a national resource different from other resources such as fossil fuels, timber and minerals. Unless the radio-frequency spectrum is effectively managed, maximum use cannot be made of this resource.



*Photograph of a spectrum analyser display taken at the Quoin Ridge Radio Monitoring Station near Richmond. It is a mid-day scan, displaying frequencies from 200 kHz to 1200 kHz labelled to identify the stations. The higher the line, the stronger the signal. Some weaker signals are from the mainland.*

Modern technology allows the transmission, reception and separation of thousands of simultaneous radio services thus making possible all radiocommunication, radio broadcasting, radionavigation and the various space satellite services. Without this science, radiocommunication, which links all nations on this planet, newspapers would contain outdated information, sea and air-transportation would be paralysed, protection of life and property by police, fire, ambulance and related emergency services would be seriously hampered, commerce disrupted and public administration gravely affected; in short, economic, social, cultural and political life would change dramatically.

So many demands are made for use of radio-frequencies in the spectrum that planning for its efficient use is a major task. In Australia the Department of Communications is responsible for overall management of the radio-frequency spectrum and the administering of the national radio laws.

#### *Objectives of Radio-Frequency Management*

The objective of radio-frequency management is to enable information to pass through the electromagnetic spectrum between all users in the most efficient and economic manner practicable with minimum interference between services.

#### *Mandatory Licensing Requirement*

Before establishing and operating any type of radio communication equipment it is necessary to obtain a licence from the Department of Communications. Licence fees vary considerably from \$10 for a simple mobile outpost radio station to \$59 700 for an all-embracing Class 'A' earth-satellite station.

### Licensing Policy

An applicant for a radio communication service under the *Wireless Telegraphy Act* will be licensed, subject to appropriate technical and operating conditions, except where:

- (i) frequencies are not available, or
- (ii) there is a potential detriment to the radio frequency spectrum, or
- (iii) there is a potential detriment to the public interest in the sense that public safety is prejudiced or manifestly unlawful activities are facilitated.

### Notice on Renewal and Conditions of Licence

A *Wireless Telegraphy Act* licence is for the specific period shown on the licence. Renewal is not, and cannot be, automatic due to changing community demands on the radio frequency spectrum. The Department will use its best endeavours to give adequate notice of non-renewal or changes in conditions of a licence on grounds other than non-compliance with the conditions of the licence. In any event, the Commonwealth accepts no liability for costs due to non-renewal or changes of licence conditions.

### Tasmania Radiocommunication Plan

An example of maximum utilisation of the radio-frequency spectrum is the Tasmania Radiocommunication Plan. Here, a relatively small portion of the radio-frequency spectrum is shared by a large number of government and semi-government bodies. This arrangement facilitates inter-communication between mobile units of the various emergency services during such events as bushfires and floods. The plan which is unique, was created by officers of the Department following radiocommunication difficulties experienced during the disastrous 1967 bushfires in southern Tasmania. At present approximately 3 000 mobile transceivers have access to the common disaster channel, with cost of equipment and site facilities for use with the plan estimated at \$5 million. (Details of the plan are provided in a special article at the end of this chapter.)

### Radio Communication Stations in Tasmania

The next table relates to radio communication stations only; particulars of broadcasting stations are specifically excluded and are dealt with in a subsequent section.

Number of Authorised Radio Communication Stations, Tasmania at 30 June  
(Two-way Services)

Particulars	1978	1979	1980	1981	1982	1983
<b>Aeronautical Mobile Service—</b>						
Aeronautical ground stations .....	21	16	23	25	10	13
Aircraft .....	71	71	93	87	88	97
Total .....	92	87	116	112	98	110
<b>Land Mobile Service—</b>						
Base stations .....	870	889	953	1 058	904	967
Fixed stations .....	131	152	189	167	153	156
Fixed receiving stations .....	8	10	12	18	10	19
Land mobile paging receiver .....	1	1	49	49	21	123
Mobile stations .....	6 538	6 869	7 392	7 706	7 276	8 234
Remote control stations .....	—	—	—	—	2	77
Total .....	7 548	7 921	8 595	8 998	8 366	9 576
<b>Maritime Mobile Service—</b>						
Marine rescue stations .....	—	—	—	6	6	8
Shore stations .....	78	86	93	92	81	96
Ship stations .....	1 590	1 841	1 789	1 722	1 975	1 965
Total .....	1 668	1 927	1 882	1 820	2 062	2 069
<b>Outpost Service—</b>						
Fixed outpost stations .....	5	4	2	2	2	1
Mobile outpost stations .....	45	55	60	58	58	69
Total .....	50	59	62	60	60	70

continued next page



**Number of Authorised Radio Communication Stations, Tasmania at 30 June  
(Two-way Services)—continued**

<i>Particulars</i>	1978	1979	1980	1981	1982	1983
Miscellaneous Services—						
Amateur (all classes) .....	321	376	406	452	490	526
Citizen band radio service .....	5 050	3 526	2 975	1 609	1 760	5 109
Disaster stations (all categories) .....	—	—	—	—	277	2 849
Experimental stations .....	45	44	39	35	30	30
Handphones .....	769	755	735	541	178	734
Interior paging stations .....	48	47	54	60	38	47
Other .....	21	266	519	59	54	84
Total .....	6 254	5 014	4 728	2 756	2 827	9 379
Grand Total .....	15 612	15 008	15 383	13 746	13 413	21 204

### *Interference Investigations*

Interference as applied to radio and television reception refers to any electrical disturbance which interrupts or interferes with the complete enjoyment of the program. The interference problem has come to the fore to an increasing extent in recent years, owing to the sensitivity of modern radio and television receivers, together with the increasing use of industrial and domestic electrical devices.

An analysis of sources of interference has revealed that the following are the main causes: electricity supply lines, domestic apparatus, television or radio equipment, industrial equipment, scientific and medical equipment, traction services, ignition sources, propagation peculiarities, computer equipment, and radiocommunication equipment.

The number of interference complaints received throughout Tasmania during recent years is listed below:

**Interference Complaints, Tasmania**

<i>Year</i>	<i>Radio-broadcast (AM and FM)</i>	<i>Television (VHF and UHF)</i>	<i>Radiocommunication services</i>	<i>Total</i>
1980-81	342	1 086	81	1 509
1981-82	160	718	68	946
1982-83	200	648	39	887

In some instances, more than one source of interference affected single complaints, whilst in others a number of complaints were due to a common source.

Pollution is a much used word today; it is considered that pollution of the radio-frequency spectrum by man-made devices is a major problem confronting the radio-frequency management authority in Tasmania.

### *Radio-frequency Management Activities*

The following activities enable the Department of Communications to control the radio-frequency spectrum:

- (i) frequency allocations—the assignment of frequencies for use by Government, industrial, commercial and private organisations;
- (ii) radio monitoring and radio-frequency measurement to ensure technical and operating standards are met;
- (iii) determination of equipment standards;
- (iv) conduct of examinations for various Radiocommunication Certificates of Proficiency;
- (v) inspection of installations to ensure that technical standards are adhered to;
- (vi) the issue of licences authorising the establishment and operation of radio-communication stations, systems and services;
- (vii) investigation of illegal radiocommunication activity, leading to court action against offenders; and
- (viii) investigation of radio and television interference.

## RADIO AND TELEVISION SERVICES

Radio broadcasting and television falls within the jurisdiction of the Federal Government and is one of the responsibilities of the Minister for Communications. Federal bodies which are directly involved include the Department of Communications, the Australian Broadcasting Commission, the Australian Broadcasting Corporation, and the Australian Telecommunications Commission.

### Types of Services

Basically the Australian broadcasting and television system consists of three types of service comprising:

- (i) national broadcasting and television stations funded by the Federal Government;
- (ii) commercial broadcasting and television stations operated by companies under licence; and
- (iii) public stations operated by corporations under licence on a non-profit basis.

### Regulation

Provisions contained in the *Broadcasting and Television Act 1942* govern the establishment and operation of all stations. Department of Communications is responsible for planning of the overall system, for the submission of planning proposals for consideration by the Minister, for all matters relating to the technical operation of stations and for the investigation of interference to the transmission and reception of programs.

In relation to the national service, the *Australian Broadcasting Corporation* is required to provide programs for transmission over stations made available by the *Australian Telecommunications Commission* and to supply and operate the studio equipment necessary for the purpose. The *Australian Broadcasting Tribunal* is responsible for the licensing and supervision of the operation (other than the technical equipment) of all stations other than national stations. In particular, the Tribunal is required to conduct public inquiries into the granting of licences following the invitation of applications by the Minister, and into the renewal of licences, the setting of standards of broadcasting practices, alleged breaches of licence conditions and such other matters as the Minister may direct. Subject to the conduct of such inquiries, the Tribunal is empowered to grant, renew, suspend or revoke licences and to determine program and advertising standards applicable to licensed stations.

### The National Services

The national services (both radio and television) are provided by the Australian Broadcasting Corporation which has sole responsibility for program material; the actual transmitters are operated by the Australian Telecommunications Commission.

### Commercial Broadcasting

Commercial radio and television broadcasting stations are operated by companies under licences granted by the Australian Broadcasting Tribunal. Their technical operating conditions are determined by the Minister for Communications. The stations obtain income from the broadcasting of advertisements. The fee for a licence is \$200 plus an amount based on the gross earnings from advertising during the preceding financial year, assessed on a sliding scale varying from 1 per cent for amounts up to \$0.5 million to 6.0 per cent on amounts exceeding \$5.0 million.

### Broadcasting Standards

Commercial radio and television stations are required to maintain standards set by the Australian Broadcasting Tribunal. These standards include requirements relating to the acceptability of program material, duration and suitability of advertisements and, in the case of television stations, special provisions relating to children's programs.

### Public Broadcasting

On 5 April 1978 the Minister for Communications outlined the Government's policy objectives for public broadcasting. He stated that the system as a whole should '... cater for and reflect the widest possible spectrum of information, opinions, values and interests in Australian society ...'. He said that the aim of public broadcasting was to ensure this diversity by serving specialised audiences and providing programming choices which the national and commercial sectors were not able to provide. The new public sector, therefore, must be complementary and supplementary to the national and private sectors.

### Television Stations in Operation

The next table gives details of the television stations in operation:

Television Stations in Operation, 30 June 1980

<i>Call sign and channel</i>	<i>Area</i>	<i>Transmitter location</i>	<i>Height above sea level—top of aerial (metres)</i>
<i>National</i>			
ABT 2 .....	Hobart	Mt Wellington	1 344
ABNT 3 (a) .....	NE Tasmania	Mt Barrow	1 457
ABKT 11 (a) .....	King Island	Gentle Annie Hill	245
<i>Commercial</i>			
TVT 6 .....	Hobart	Mt Wellington	1 323
TNT 9 .....	NE Tasmania	Mt Barrow	1 419

(a) Transmits programs originating from ABT 2.

### Relay of Television Programs from Other States

Tasmania is linked with Victoria by a broadband radio link installed by the Australian Telecommunications Commission which enables the direct relay of television programs from the mainland states.

### Microwave Links, Intrastate Relays and Translator Stations

The prime sources of programs in Hobart are the commercial and national studios which are linked to their Mt Wellington transmitters (TVT 6 and ABT 2) by microwave links; the commercial studio in Launceston feeds programs to its Mt Barrow transmitter (TNT 9) by the same method. As there is no national studio at Launceston, the transmitter on Mt Barrow (ABNT 3) relays the Hobart national programs through the broadband radio link. A similar service is also available to commercial stations.

Tasmania, due to its terrain, has areas where television reception direct from the Mt Wellington or Mt Barrow transmitters is either difficult or impossible. To provide good reception in such areas, translator stations, which are low-powered stations receiving signals from a parent station and re-transmitting on a different frequency to areas with poor reception, have been installed as shown in the following table. Translator stations cannot broadcast directly. The next table shows translator stations in operation and the areas served:

Television Translator Stations in Operation at 30 June 1982

Area served	Parent station		Local channel	
	National	Commercial	National	Commercial
Burnie .....	ABNT 3	TNT 9	4	10
Derby .....	..	TNT 9	..	11
East Devonport .....	ABNT 3	TNT 9	45 (approx.)	48 (approx)
Lileah .....	ABNT 3	TNT 9	8	6
Maydena .....	..	TVT 6	..	8
Queenstown-Zeehan .....	ABT 2	TVT 6	4	8
Rosebery-Renison Bell .....	ABT 2	TVT 6	1	10
Savage River-Luina .....	ABNT 3	TNT 9	4	7
Smithton .....	ABNT 3	TNT 9	4	11
South Launceston .....	ABNT 3	TNT 9	1	11
St Helens .....	ABNT 3	TNT 9	0	7
St Marys-Fingal Valley .....	ABNT 3	TNT 9	1	11
Strahan .....	ABT 2	..	10	..
Strathgordon .....	ABT 2	TVT 6	5	8
Swansea-Bicheno .....	ABT 2	TVT 6	4	8
Taroona .....	..	TVT 6	..	8
Waratah .....	ABNT 3	TNT 9	2	11
Wynyard .....	ABNT 3	TNT 9	1	5A

## Radio Stations in Operation

The following table gives details of the radio stations in operation in Tasmania:

Radio Stations in Operation at 30 June 1982

Call sign	Classification	Location	Hours of service (weekly)
7ZL .....	National	Hobart	137.00
7ZR .....	National	Hobart	133.00
7NT .....	National	Launceston	141.00
7QN(a) .....	National	Queenstown	141.00
7FG(a) .....	National	Fingal Valley	141.00
7SH (a) .....	National	St Helens	141.00
7HO .....	Commercial	Hobart	168.00
7HT .....	Commercial	Hobart	168.00
7AD .....	Commercial	Devonport	116.30
7BU .....	Commercial	Burnie	118.30
7EX .....	Commercial	Launceston	147.00
7LA .....	Commercial	Launceston	168.00
7QT .....	Commercial	Queenstown	77.00
7SD .....	Commercial	Scottsdale	116.30
7THE-FM .....	Public	Hobart	168.00
7HFC-FM (b) .....	Public	Hobart	112.00
ABC-FM .....	National	{ Hobart Launceston	168.00

(a) Transmits, in the main, programs originating from 7NT.

(b) Commenced operation in 1980.

Tasmania's first FM (frequency modulated) station, 7CAE-FM Hobart, began regular broadcasting in February 1977 on a frequency of 92.1 MHz. The call sign of 7CAE-FM was changed to 7THE-FM in March 1982. A second FM station (7HFC-FM), operated by the Hope Foundation Ltd, commenced regular broadcasting during 1980. The ABC's FM service was extended to Tasmania in August 1981.

Although there are areas of poor reception due to difficult terrain, most of Tasmania receives a satisfactory radio service from one or more of the above stations. In addition,

the northern part of the State receives a service from some mainland stations. The structure and population distribution in the State has given rise to a regional pattern of radio stations with concentrations in Hobart and Launceston and outlying stations in the north-east, north-west and west.

#### Further References

##### *ABS publications produced by the Tasmanian Office*

Motor Vehicle Registrations, Tasmania (9301.6), monthly.  
 Motor Vehicle Census, Tasmania (9302.6), irregular.  
 Road Traffic Accidents Involving Casualties, Tasmania (9401.6), quarterly.  
 Road Traffic Accidents Involving Casualties, Tasmania (9402.6), half yearly.

##### *ABS publications produced by the Canberra Office*

Rail, Bus and Air Transport (9201.0), annual.  
 Overseas Shipping (9207.0), annual.  
 Registration of New Motor Vehicles (Preliminary) (9301.0), monthly.  
 Motor Vehicle Registrations (9303.0), monthly.  
 Motor Vehicle Registrations (9304.0), annual.  
 Road Accident Fatalities (9401.0), monthly.

### THE TASMANIA RADIOCOMMUNICATION PLAN

*(This article was provided by Mr Harry Melling, the State Manager, Department of Communications, Hobart)*

#### Introduction

The Tasmania Radiocommunication Plan, unique in Australia and perhaps the world, was developed to improve liaison between emergency services following severe bushfires in 1967.

The emergency organisations concerned operated radiocommunication equipment on diverse channels in the high and very high radio-frequency bands and intercommunication was impracticable because of equipment incompatibility.

#### Plan Objectives

In order to prevent a recurrence of such a situation, a plan was devised to re-organise the radiocommunication facilities of those organisations with a role in civil emergency activity, which would enable them to intercommunicate in any part of the State. Hence, a vehicle would be able to communicate with any Radiocommunication Plan participant, using a single suitably-equipped transceiver.

Additionally, the projected plan needed to allow the same base and mobile equipment to be used for day-to-day domestic radio traffic. Thus the Plan was to become, in effect, a State Disaster Radio Plan and a Domestic Plan combined—to be known as the Tasmania Radiocommunication Plan.

#### Development

The Tasmania Radiocommunication Plan was conceived and developed by the State Manager, Tasmania, Department of Communications (Mr Harry Melling) in 1967-68.

A major obstacle in the development program was the presence of private radio user allocations in the proposed frequency band.

Close liaison followed with the then State Premier, Mr Eric Reece, who then wrote to those users, requesting their co-operation in relinquishing their allocated frequencies in favour of the Plan and offering State Government funds to cover all costs associated with a frequency change. Co-operation was received from all concerned. With subsequent expansion of the Plan, this procedure has been repeated with similar success.

### Historical Background

On Tuesday, 7 February 1967, many areas of Southern Tasmania were devastated by extensive fires in which 62 lives were lost, 1 500 homes destroyed, and 264 260 hectares of farmland, forest and bushland burnt out. The cost to the community was estimated at \$ 40 million.

Official records of the disaster are available from several sources. A paper entitled 'Report on the Southern Tasmanian Fires of 7 February 1967' by A. G. McArthur and N. P. Cheney of the Forest Research Institute in Canberra, stated:

'In many places the people of Hobart and other seaside towns survived a fire situation which few other people in the world have ever experienced.'

This holocaust brought about an almost complete breakdown of communication facilities, both within Tasmania and to mainland Australia. From a radiocommunication viewpoint, the disaster highlighted the need for State authorities and others engaged in emergency situations to be able to intercommunicate. However, these various organisations conducted their radio activities on diverse channels in the high and very high frequency bands, without co-ordination. Because of this and equipment incompatibility, intercommunication was impracticable and operations during the crises were severely hampered.

In October 1967 Mr Reece initiated the development of a State Disaster Plan. Mr Reece wrote to the Director of the Postmaster-General's Department, Mr Ray Gilson, requesting Departmental participation.

The proposed State Disaster Plan would assign responsibilities and detailed operational and administrative procedures for adoption in future crisis situations.

Instead of offering the resources of the Department—either in manpower or equipment—in the event of an emergency, Mr Gilson suggested that it would be more appropriate for the Department to take a major controlling role over communications in the State Disaster Plan. It was already the responsibility of the Department to provide all public communication facilities and to approve and supervise all manner of radiocommunication services, including the provision of frequency allocations and the determination of radiocommunication equipment technical standards.

The Director committed the resources of his Department, in particular the radio frequency management facilities, to this project. The State Premier was informed that a comprehensive review of the radiocommunication requirements of all State organisations during emergencies had been undertaken and a recommendation was made for the establishment of a State-wide integrated radio network.

The letter stated:

'This proposal will facilitate intercommunication in emergencies between mobile radiocommunication stations of (e.g.) Tasmania Police, Forestry, Rural Fire Board, City and Urban Fire Brigades and any Municipality of the State, without interfering with the normal day-to-day operation of these services.'

Whilst accepting this commitment, the Director also emphasised to the staff of the Department their responsibility to the Government and people of Tasmania for the success of the venture:

'I must stress the reliance being placed by the Premier and the State Government on the Department's ability to meet its commitments in the communications area. The Premier has already informed me of his appreciation of the progress so far made and I am confident that all Post Office staff in the State will support those Departmental Officers who have been given the responsibility of planning, equipping and controlling the communications division of the State Disaster Organisation.'

Thus, authority was given for Post Office Radio Frequency Management officers to become involved in this important activity.

On the first day of July 1975 a major reorganisation of Australia's postal and telecommunication administration took place and as a result of this and subsequent changes later that year the Postmaster-General's Department was abolished. Radio frequency management became the province of the new Postal and Telecommunications Department, later to be known as the Department of Communications.

With these changes, responsibility for the Disaster Communications Plan passed to the State Emergency Service, which formed a Disaster Radio Committee representing most of the organisations concerned with emergency communications.

### State Disaster Radiocommunication Committee

The current membership of the State Disaster Radiocommunication Committee constitutes, under the Chairmanship of the Director of the State Emergency Service, representatives of the Department of Communications, Tasmania Police, Tasmanian Fire Service (Urban), Tasmanian Fire Service (Rural), Tasmanian Ambulance Service, Hydro-Electric Commission, Department of Main Roads, National Parks and Wildlife, Forestry Commission and a Municipal Council representative.

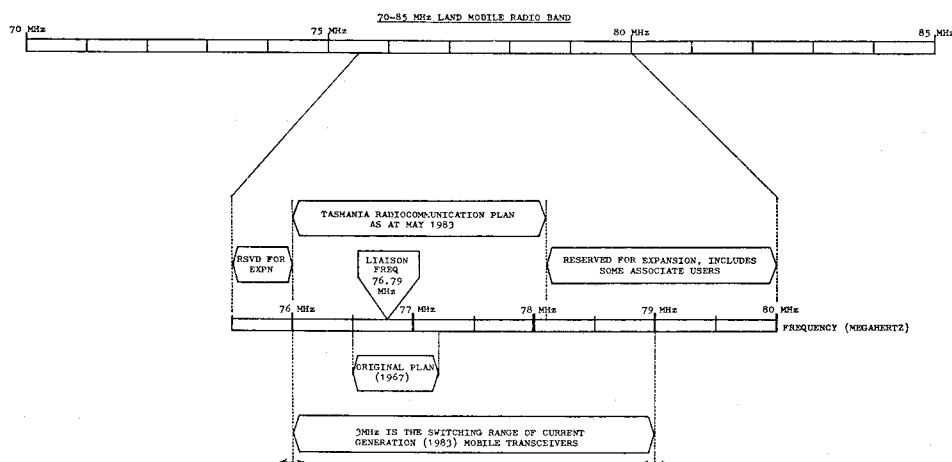
The Committee is primarily concerned with the organisation of the overall Plan and the individual requirements of the various Plan participants. Radio frequency management advice and specialist technical expertise is provided by the Department of Communications' representative.

### Frequency Band

The frequencies chosen for the Tasmania Radiocommunication Plan are in the VHF low-band, i.e. 70-85 MHz.

It has been established by comprehensive field trials that this particular frequency band is more suited to the topography of Tasmania than the higher frequency VHF or UHF land mobile bands. The 'Australian Pilot' describes Tasmania as 'probably the most thoroughly mountainous island in the world'.

## TASMANIA RADIOCOMMUNICATION PLAN



The allocation of frequencies within the Plan has in the past been limited by the available mobile technology. To fully utilise the allocated Plan channels, the mobile unit must be capable of frequency switching from the lowest to the highest frequency channel allocated without performance degradation. By the application of frequency synthesis technology, current third generation mobiles (August 1983) have the capability of spanning a 3 MHz frequency range and with ability to select any of 100 channels. A suitable portion of the frequency band has been reserved for future expansion and will be released for use as required.

It is worthy of note that radiocommunication equipment manufacturers, in Australia and abroad, became aware of the Plan and the need for 'wideband' equipment. The Plan was thus a catalyst for the development of 'wideband' 70 MHz radiocommunication equipment.

### **Participation**

All State Government emergency services and all Municipal Councils are participants in the Plan. Additionally, public instrumentalities, private companies and pastoralists who have responsibilities for safety of life, safety of property, firefighting, flood control, or other emergent situations are also participants in the Plan.

Examples of private company participation are as follows:

#### *Forestry*

Forestry organisations assist in the Plan by having large numbers of mobile stations in extensive forest areas of the State. The companies are able to communicate with each other and with Forestry Commission units and fire lookout towers when necessary, as well as with all emergency services and Municipal Councils.

#### *Industrial*

At Bell Bay in northern Tasmania, a group known as the Bell Bay Mutual Aid Group has been formed. This group consists of business, commercial and industrial enterprises.

The various companies are concerned with safeguarding the port and environs of Bell Bay and to that end render mutual assistance when required. Each company is able to communicate with any of the others and also with the emergency services and the local George Town Council.

#### *Pastoral*

Pastoral frequencies are reserved in the Plan for those isolated farmers and graziers who have proved to be very important during fire management operations.

Co-ordination between these diverse groups is possible because all participants in the Plan carry the State-wide liaison frequency.

### **Organisation**

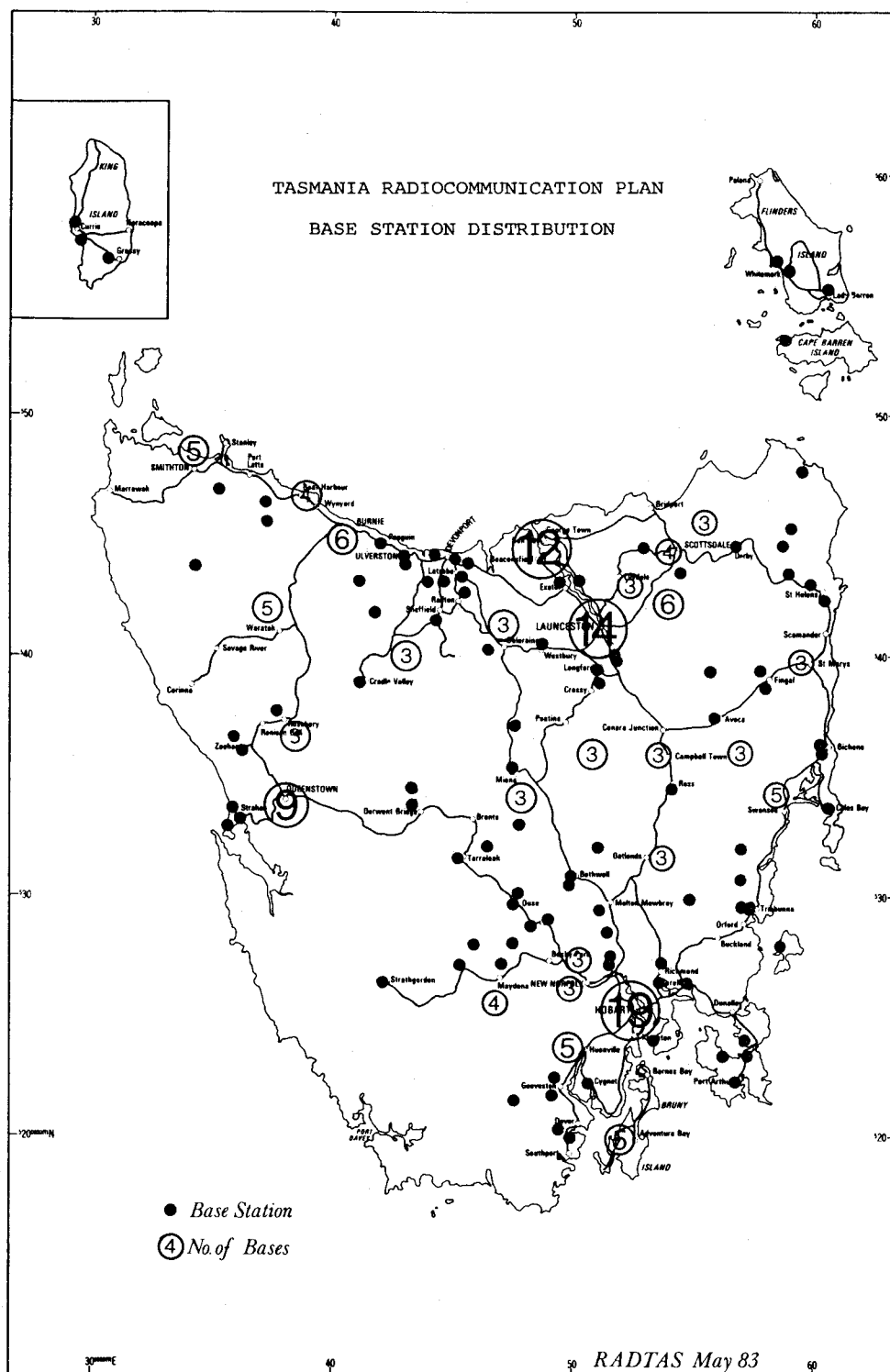
The Radiocommunication Plan, together with good radio training and discipline, avoids the congestion and lack of liaison between organisations which had bedevilled many emergency situations in the past. It is necessary in such circumstances for an overall network controller to co-ordinate communications. The Tasmania Police, the State Fire Commission and the State Emergency Service, each possess mobile command and control stations which are suitably deployed and able to communicate with all on-scene units.

The co-ordinator may belong to whichever organisation has prime responsibility in the particular situation and he has at his command some 50 operational channels for use in an emergency.

An important feature of the Plan is its ability to employ domestic channels for routine domestic traffic and matters of mutual concern to municipalities with common boundaries, whilst the liaison channel is kept exclusively for high-priority emergency traffic.

The VHF Plan channels are supplemented by on-scene communications using low power handheld equipment in the UHF band, further easing the load on the liaison channel. Longer distance communications employ HF radio or existing Telecom facilities.





### Radiocommunication Stations Operating Within The Plan

The number of participating bodies in various categories are as follows:

State instrumentalities	10
Municipal councils/commissions	48
Private companies	13
Total (June 1983)	71

Equipment categories (August 1983) are divided as follows:

	VHF	HF
Bases	200	20
Mobiles	2 500	{ 50
Portables	450	

### Number of Available Plan Frequencies

Active	50	Reserved	80 (a)	(June 1983)
--------	----	----------	--------	-------------

(a) The 80 reserved frequencies are available for use as site and other assignment criteria dictate.

### Recent Developments Within The Plan

The Tasmania Fire Service communications system has recently undergone a major radio frequency review. The network that has been developed is quite complex because of the different requirements of the urban and rural brigades. Their combined radio channel capacity within the Plan has been increased from 2 to 10 channels. Extensive use has also been made of UHF radio links to control the remote VHF base stations. Implementation of this review is proceeding and when completed, will provide 24 hour radio contact with all brigades and improve fire ground communication, State-wide.

Planning is proceeding for the development of an innovative radio network for the Tasmanian Ambulance Service. The envisaged system, when completed, will provide a vastly upgraded communication service State-wide and will feature in particular—

- Automatic base station selection (voting);
- A dedicated hospital communication channel (voice and electrocardiograph use); and
- Regional communication facilities (normally available through country hospitals).

This upgrading will place ambulance radiocommunications in this State in the forefront of similar operations elsewhere in Australia.

### Conclusion

The Tasmania Radiocommunication Plan has been operational since 1968 and has been tested on many occasions when emergent situations have developed within the State.

The Plan which is continually being upgraded as a result of technological change and user requirements provides an efficient, cost effective and flexible multi-access communication system for Tasmania. The equipment employed for emergent situation communications is the same equipment used for normal operations by the various bodies—users are therefore familiar with the operation and performance of that equipment.

The Plan allows for a standard stock of compatible back-up equipment to be kept centrally and used as the need arises.

## CHAPTER 18

### PRIVATE FINANCE

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## Chapter 18

### PRIVATE FINANCE

#### BANKING AND EXCHANGE RATES

##### Types of Banks

###### *General*

Banks in Tasmania can be classified by ownership as follows: (i) Government—The Reserve Bank of Australia, the Commonwealth Development Bank of Australia, the Commonwealth Trading Bank of Australia and the Commonwealth Savings Bank; (ii) Private—the private trading banks and the private savings banks; and (iii) Trustee—The Savings Bank of Tasmania and the Launceston Bank for Savings.

For statistical purposes such a classification is not helpful since banks, both government and private, may be engaged in the same type of activity. Hence, the classification in use is one which groups banks according to their type of activity, not according to their ownership. The major banking statistics for the State are presented in two distinct series under the headings 'Trading Banks' and 'Savings Banks'.

###### *Trading Banks*

The following four institutions in Tasmania are classified, for statistical purposes, as 'trading banks': Commonwealth Trading Bank of Australia; Australia and New Zealand Banking Group; National Commercial Banking Corporation of Australia Ltd and Westpac Banking Corporation.

###### *Savings Banks*

In the 1950s, only three savings banks operated branches in Tasmania: Hobart Savings Bank (now the Savings Bank of Tasmania), Launceston Bank for Savings (both trustee savings banks) and the Commonwealth Savings Bank. The trustee savings banks date from early colonial days, the Launceston Bank opening in 1835, and the Hobart Bank in 1845.

In recent years, private trading banks have opened savings bank subsidiaries in the State, the current list of such banks being: Australian and New Zealand Savings Bank Ltd; Westpac Savings Bank; and National Australia Savings Bank Ltd.

Savings banks also offer cheque facilities to customers; however, for statistical purposes their cheque operations are included in 'savings bank statistics'.

##### Transactions of Trading Banks

The accompanying table summarises the principal statistics relating to all trading banks in Tasmania for a five-year period. The following definitions apply:

- (i) Deposits—a bank liabilities item. The figure is the average, for the year, of *balances* read at weekly intervals.
- (ii) Loans, advances and bills discounted, etc.—a bank assets item. The figure is the average, for the year, of *balances* read at weekly intervals.
- (iii) Debits to customers' accounts—mainly the total of all cheques drawn by customers during a given period. The figure is the average, for the year, of such weekly entries.

## Transactions: All Trading Banks in Tasmania

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Number</i>					
Branches open at 30 June .....	106	106	105	105	105
<i>Deposits, Advances and Debits to Customers' Accounts: Weekly Averages (\$'000)</i>					
Deposits (a)—					
Federal and State Governments	23 722	26 871	5 580	6 123	6 401
Other—					
Fixed .....	217 349	203 817	235 466	320 426	398 037
Current—Bearing interest .....	20 670	22 937	24 226	22 694	21 517
Not bearing interest	153 439	172 284	179 985	183 162	181 651
Total .....	415 180	425 910	445 257	532 364	607 605
Loans, advances and bills discounted (a) (b) .....	300 811	345 930	394 596	432 599	441 305
Debits to customers' accounts (c) .	220 073	256 249	287 683	318 147	337 733

(a) The average, for the month or year, of *balances* read at weekly intervals.

(b) Loans, advances and bills discounted, etc.; excludes loans to authorised dealers in the short-term money market.

(c) Covers all trading banks and in addition, the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank.

The table below gives a classification of trading bank advances outstanding within Tasmania by type of borrower resident within Australia, and in total for non-residents of Australia.

## Trading Banks: Classification of Advances Outstanding within Tasmania (\$m)

Type of Advance	At second Wednesday in July			
	1980	1981	1982	1983
<i>Borrowers Resident within Australia</i>				
Business advances—				
Agriculture, grazing and dairying—				
Sheep grazing .....	12	18	17	15
Dairying and pig raising .....	12	14	15	15
Other .....	28	35	39	40
Total .....	52	67	71	70
Manufacturing .....	55	57	35	26
Transport, storage and communication .....	7	9	11	8
Finance—				
Building and housing societies .....	—	—	—	1
Pastoral and finance companies .....	—	1	1	—
Hire purchase and other finance companies .	1	1	2	1
Other .....	3	4	5	5
Total .....	5	7	8	8
Retail and wholesale trade .....	55	61	61	57
Building and construction .....	13	14	14	11
Other business .....	58	61	55	53
Unclassified .....	4	4	15	12
Total business advances .....	249	279	270	246

continued next page

**Trading Banks: Classification of Advances Outstanding within Tasmania**  
(*\$m*)—*continued*

Type of Advance	At second Wednesday in July			
	1980	1981	1982	1983
<i>Borrowers Resident within Australia</i>				
Advances to public authorities (excl. Federal and state governments) .....	3	3	3	4
Personal advances—				
Building or purchasing own home (individuals) .....	19	20	20	15
All other .....	110	129	149	169
Total personal advances .....	129	149	169	184
Advances to non-profit organisations .....	4	4	4	4
Total advances to resident borrowers .....	385	436	445	438
<i>Borrowers Non-resident within Australia</i>				
Total non-resident borrowers .....	—	—	—	—
<i>Total Advances to Resident and Non-resident Borrowers</i>				
Grand total .....	385	436	445	438

**Interest Rates and Security Yields**

The next table shows the interest rates available on fixed deposits, the interest yield from treasury notes and the yield from government securities:

**Interest Rates and Security Yields, Australia**  
(Per Cent Per Annum)

Particulars	Rate			
	June 1980	June 1981	June 1982	June 1983
Trading banks—				
Fixed deposits (less than \$50 000)—				
3 months and less than 6 months .....	8.00-8.50	10.50-12.25	13.00-15.25	10.00-13.20
6 months and less than 2 years .....	8.50-10.00	11.00-12.25	13.00-15.00	11.25-13.25
2 years to 4 years .....	9.00-10.00	11.25-12.00	13.00-14.50	11.00-12.00
Fixed deposits (\$50 000 and over)—				
30 days to 4 years (a) .....	10.00	(b)	(b)	(b)
Federal Government securities yield—				
Non-rebateable bonds (c)—				
2 years .....	11.50	13.10	16.40	13.70
10 years .....	11.78	13.10	16.40	14.70
20 years .....	11.76	13.10	16.40	14.90
Treasury notes (issue yield)—				
13 week notes .....	10.84	13.31	15.47	11.93
26 week notes .....	10.55	13.25	16.04	12.70

(a) Subject to this maximum, actual rates are a matter between banks and their customers.

(b) Not subject to a maximum rate.

(c) Yields shown are average for week centred on last Wednesday of month and exclude effect of brokerage.

**Savings Banks**

The following table summarises the principal statistics relating to savings banks in Tasmania. Deposits are compiled on a basis different from that used in the case of trading banks. 'Deposits lodged' is the total inflow of deposits during the year, and 'depositors' balances' is a single liability reading taken at the end of the year.

The number of operative accounts excludes school bank accounts and small inoperative accounts. The other items in the table relating to depositors' balances, etc., relate to all accounts including school bank accounts and small inoperative accounts.

#### All Savings Banks, Tasmania

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Branches open (a) .....no.	165	167	168	168	169
Operative accounts (a) .....000	651	695	718	741	775
Deposits lodged .....\$'000	1 185 564	1 487 842	1 791 657	2 182 955	2 641 164
Interest added .....\$'000	30 338	33 826	40 357	53 190	72 517
Excess of deposits over withdrawals .....\$'000	26 960	20 548	16 430	7 004	106 550
Depositors' balances (a) .....\$'000	587 755	642 129	698 917	759 111	938 178
Per head of population— Depositors' balances (a) .....\$	1 404	1 516	1 636	1 777	2 179

(a) At end of year.

The next table gives details of housing finance transactions by savings banks in Tasmania:

#### Saving Banks: Housing Finance Transactions, Tasmania

Period	Loans approved to individuals for—						Cancellation of loans previously approved to individuals for housing	
	Construction or purchases of new dwellings		Purchases of established dwellings		Alterations and additions Amount	Total Amount		
	Number	Amount	Number	Amount			Number	Amount
	(a)	(b) \$'000	(a)	(b) \$'000				\$'000
1977-78 .....	779	14 767	2 113	39 617	2 752	57 136	185	2 826
1978-79 .....	923	20 667	2 670	55 191	2 588	78 446	130	2 272
1979-80 .....	815	18 414	2 317	48 985	2 496	69 895	136	2 348
1980-81 .....	709	16 365	2 611	55 666	2 113	74 144	99	1 921
1981-82 .....	527	12 177	2 082	45 180	1 926	59 283	108	1 685
1982-83 .....	430	10 736	2 496	54 650	1 999	67 385	78	1 266

(a) Number of loans for dwelling units approved for first mortgage finance only.

(b) Includes second mortgage finance to complete original purchase or construction.

#### Interest Rates

The next table shows the maximum rates of interest paid to depositors or charged to borrowers with home mortgages by The Savings Bank of Tasmania. Interest rates paid to depositors or charged to borrowers with home mortgages by the Launceston Bank for Savings, the Commonwealth Savings Bank and the savings bank subsidiaries of the private trading banks, may vary marginally from the rates shown in this table.

**The Savings Bank of Tasmania: Maximum Interest Rates (a)**  
(Per Cent Per Annum)

<i>Date of change in rate</i>	<i>On savings accounts (b)</i>	<i>On home mortgages (c)</i>	<i>Date of change in rate</i>	<i>On savings accounts (b)</i>	<i>On home mortgages (c)</i>
May 1980 .....	4.00	10.00	April 1982 .....	4.00	13.50
August 1980 .....	4.00	10.50	February 1983 .....	4.00	12.50
January 1981 .....	4.00	11.50	October 1983 .....	4.00	12.00
September 1981 .....	4.00	12.50	February 1984 .....	4.00	11.50

(a) Operative from first day of month shown.

(b) From February 1966, fixed deposit rates have been 0.25 per cent greater than trading banks rates, effective on accounts to \$4 000. From \$4 001 to \$20 000 the interest rate was 6.25 per cent.

(c) Effective for all loans to \$100 000.

### Overseas Exchange Rates

The next table shows average overseas exchange rates operative for recent periods:

**Exchange Rates (a): Average for Period Shown, Overseas Currency Relative to Australian Dollar**

<i>Country</i>	<i>Unit of overseas currency</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Belgium (b) .....	Francs	34.93	32.87	37.85	50.32	46.58
Canada .....	Dollars	1.32	1.29	1.36	1.30	1.15
France .....	Francs	4.88	4.63	5.40	6.49	6.59
Germany, Federal Republic of .....	Deutsche marks	2.15	1.98	2.31	2.50	2.30
Hong Kong .....	Dollars	5.46	5.52	5.97	6.17	6.08
India .....	Rupees	9.13	8.83	9.23	9.85	9.13
Italy .....	Lire	946	916	1113	1363	1325
Japan .....	Yen	225.84	257.77	246.67	252.53	231.12
Netherlands .....	Guilders	2.33	2.18	2.53	2.76	2.54
New Zealand .....	Dollars	1.07	1.13	1.23	1.36	1.33
Pakistan .....	Rupees	11.11	10.83	11.27	11.47	11.45
Singapore .....	Dollars	2.48	2.40	2.43	2.23	1.99
South Africa .....	Rand	0.97	0.91	0.90	1.09	1.04
Sri Lanka .....	Rupees	16.82	16.78	19.77	21.37	19.86
Switzerland .....	Francs	1.89	1.83	2.10	2.04	1.94
USA .....	Dollars	1.13	1.11	1.16	1.06	0.94
United Kingdom .....	Pound stg	0.57	0.50	0.51	0.59	0.58

(a) Average telegraphic transfer selling rates at Sydney. Average rates are not available for China, Malaysia and USSR; however, daily quotations are available on application to any trading bank.

(b) Two rates have been quoted for Belgium from 20.9.71. The rate shown for these periods is the financial rate used for trade transactions.

## INSURANCE

### General

The following data on insurance are divided into life insurance and insurance other than life; i.e. fire, marine and general insurance. No distinction is made between insurance and assurance, the former term being used in all contexts.

#### Legislation

Section 51 of the Federal Constitution confers the necessary powers on the Federal Parliament to legislate with respect to 'insurance other than state insurance; also state insurance extending beyond the limits of the state concerned'. The principal Federal legislation affecting current insurance business is as follows:

**Life Insurance Act 1945:** This Act provides for uniform control throughout Australia of life insurance business other than business transacted by state government insurance offices, friendly societies and trade unions providing benefits for members and dependants. Also excluded is business in relation to superannuation benefits provided wholly by an organisation established by employers, employees or both.



Under the Act each company must maintain at least one office in each State or Territory in which it conducts life insurance business. Companies are also required to set up statutory funds in respect of their life insurance business in Australia and all amounts received in respect of this business must be paid to, and form part of, the assets of these funds. The assets of the statutory funds can only be used to meet liabilities or expenses relating to the life insurance business and, in certain circumstances, the payment of dividends to shareholders.

*Insurance Act 1973:* This Act restricts the right to carry on insurance business to authorised companies and Lloyd's underwriters and makes arrangements aimed at ensuring that these are at all times financially sound. Insurance business carried on by the Federal Government, a state government or by a number of named government or semi-government authorities is exempt. The Act does not extend to life insurance business, registered medical or hospital benefits organisations and certain other bodies.

### Life Insurance

Since 1947 returns lodged under the *Life Insurance Act 1945* have been used to compile life insurance statistics. In Tasmania, the Government Insurance Board transacts a limited form of life insurance only (in respect of home mortgage repayments of purchasers of Housing Department dwellings) and tables that follow refer to operations of enterprises exclusively in the private sector. The transactions in the next table are concerned with Tasmania as the 'State of issue' of the policies, not necessarily as the 'State of risk'.

#### Life Insurance Transactions (Excluding Annuities), Tasmania (a)

Particulars	1977	1978	1979	1980	1981	1982
<i>Ordinary and Industrial Business (b)</i>						
New policies issued—						
Number .....	14 898	13 984	12 934	11 820	10 964	11 608
Sum insured .....\$m	253.5	273.9	281.6	291.4	295.6	329.2
Annual premiums .....\$m	3.4	3.3	3.2	3.2	3.4	3.6
Policies discontinued or reduced—						
Number .....	21 953	22 044	21 936	21 786	22 477	23 047
Sum insured .....\$m	123.1	128.0	177.9	198.0	231.6	266.7
Annual premiums .....\$m	2.5	2.6	2.7	2.7	3.5	3.7
<i>Superannuation Business</i>						
New policies issued—						
Number .....	2 933	2 403	1 982	2 481	3 788	3 022
Sum insured .....\$m	175.8	124.2	156.9	182.8	262.3	296.2
Annual premiums .....\$m	5.9	3.8	3.8	4.6	6.7	7.9
Policies discontinued or reduced—						
Number .....	1 979	4 307	2 014	1 549	2 122	1 653
Sum insured .....\$m	61.2	62.3	59.2	84.0	127.3	113.6
Annual premiums .....\$m	1.7	1.9	2.0	2.0	2.9	3.0
<i>Total Business</i>						
New policies issued—						
Number .....	17 831	16 387	14 916	14 301	14 752	14 630
Sum insured .....\$m	429.2	398.1	438.5	474.2	557.9	625.4
Annual premiums .....\$m	9.1	7.1	7.0	7.8	10.1	11.5
Policies discontinued or reduced—						
Number .....	23 932	26 351	23 950	23 335	24 599	24 700
Sum insured .....\$m	184.3	190.3	237.1	282.0	358.9	380.3
Annual premiums .....\$m	4.2	4.5	4.7	4.7	6.4	6.7

*continued next page*

## Life Insurance Transactions (Excluding Annuities), Tasmania (a)—continued

Particulars	1977	1978	1979	1980	1981	1982
<i>New Loans Paid Over (Excluding Advances of Premiums)</i>						
On mortgage of real estate .....\$'000	3 861	5 668	4 561	4 437	5 587	5 023
On companies' policies .....\$'000	2 363	2 126	2 122	2 185	2 899	2 697
On other securities .....\$'000	196	252	213	289	254	396
Total .....\$'000	6 420	8 046	6 896	6 911	8 740	8 116

(a) These figures are annual aggregates of those published monthly in *Life Insurance, Australia* (Catalogue No. 5621.0). They are not comparable with figures published annually in *Life Insurance* (Catalogue No. 5622.0) which contains information not related to uniform accounting periods but to the companies' balance dates between 1 January and 31 December of the year shown.

(b) Industrial business refers, in the main, to policies on which the premiums are collected as regular instalments by agents on commission. As the significance of industrial insurance has been declining, and as more businesses have been transferring it to their ordinary registers, only a few businesses now maintain registers of industrial business. In order to preserve the confidentiality of these businesses' operations it has become necessary to combine the details of ordinary and industrial business.

## Fire, Marine and General Insurance

Information on insurance, other than life, is compiled from returns provided by insurance companies transacting fire, marine and general insurance business in Tasmania (including the Tasmanian Government Insurance Office). Statistics that follow relate to financial years of companies ending within the period shown and to policies issued in Tasmania and not necessarily to those for which the risk is situated in Tasmania.

Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy-holders during the year. They are not adjusted to provide for premiums unearned at the end of the year.

Claims include payments made during the year, *plus* the estimated amount of outstanding claims at the end of the year, *less* the estimated amount of outstanding claims at the beginning of the year.

## Types of Insurance

The next table shows premiums and claims according to the class of insurance business transacted in 1981-82:

Fire, Marine and General Insurance, Tasmania  
Premiums and Claims for Each Type of Insurance, 1981-82  
(\$'000)

Class of business	Premiums	Claims	Class of business	Premiums	Claims
Motor vehicle comprehensive			Boiler, engineering and		
(a) .....	23 102	17 056	machine breakdown .....	695	726
Employers' liability .....	20 117	16 840	Plate glass .....	330	235
Compulsory third party (b) ....	13 379	38 501	Professional indemnity .....	83	177
Fire and sprinkler leakage .....	5 002	2 498	Livestock .....	163	126
Houseowners' and house-			Contractors all risks .....	248	150
holders' comprehensive .....	12 395	7 771	Guarantee .....	92	12
Marine (hull and cargo) .....	2 487	2 496	Product liability .....	62	97
Personal accident .....	2 138	1 110	Fruit crop and hailstone .....	202	108
Loss of profits .....	574	18	Other (c) .....	3 080	1 501
Public liability .....	1 973	332			
Burglary .....	797	426			
			Total .....	87 697	90 638

(a) Includes motor cycles.

(b) Motor vehicles only. The Motor Accident Insurance Board accepted all rights, obligations and liabilities in respect of Compulsory Third Party Insurance from 1 October 1974.

(c) Includes aviation, loans, mortgages and leases.

**Ratio of Claims to Gross Premiums:** The following table shows the ratio of claims to premiums for the more important classes of business over a three-year period:

**Fire, Marine and General Insurance, Tasmania**  
Ratio of Claims to Premiums (a)  
(Per Cent)

Class of business	1979-80	1980-81	1981-82
Motor vehicle comprehensive (including motor cycles) .....	69.5	76.2	73.8
Employers' liability .....	86.5	84.9	83.7
Compulsory third party (b) .....	149.5	226.8	287.8
Fire and sprinkler leakage .....	129.0	101.2	49.9
Houseowners' and householders' comprehensive .....	71.0	72.4	62.7
Marine (hull and cargo) .....	70.5	74.8	100.4
Personal accident .....	58.1	62.8	51.9
Loss of profits .....	n.p.	74.8	3.1
Public liability .....	65.8	37.6	16.8
Burglary .....	54.3	68.4	53.5
Boiler, engineering and machine breakdown .....	108.0	73.8	104.5
All classes .....	86.8	95.5	103.4

(a) See beginning of section for definition of claims and premiums.

(b) Motor vehicles only.

## INSTALMENT CREDIT AND OTHER FINANCING

### Finance Companies

**Finance Companies:** In these statistics finance companies are incorporated companies mainly engaged in providing, to the general public, the following credit facilities: (i) instalment credit for retail sales; (ii) personal loans; (iii) wholesale finance; (iv) factoring; (v) other consumer and commercial loans; (vi) financial leasing of business equipment and plant; and (vii) bills of exchange.

The definitions associated with the statistics are set out in considerable detail in the bulletin *Finance Companies Transactions* (Cat. No. 5615.0) published by the Canberra Office of the Bureau.

**Finance Companies: Transactions, Tasmania**  
(\$m)

Year	Instalment credit for retail sales	Wholesale finance	Other consumer and commercial loans		Total all contracts
			Contracts including charges (a)	Contracts excluding charges (b)	
Amount Financed					
1977-78 .....	61.1	118.6	48.3		228.0
1978-79 (c) .....	55.5	123.1	49.0		227.6
1979-80 .....	46.9	128.0	55.4		230.3
1980-81 .....	44.3	136.8	59.7		240.8
1981-82 .....	44.3	138.4	58.0		240.6
1982-83 .....	38.4	125.8	51.2		215.3
Collections and Other Liquidations of Balances					
1977-78 .....	83.7	116.9	35.3	17.9	253.8
1978-79 (c) .....	85.8	123.2	47.9	14.0	270.9
1979-80 .....	81.6	127.9	54.5	13.3	277.2
1980-81 .....	70.9	140.1	60.0	11.2	282.2
1981-82 .....	67.3	137.1	61.3	19.7	285.4
1982-83 .....	65.7	130.7	62.3	18.9	277.7

*continued next page*

**Finance Companies: Transactions, Tasmania**  
(**\$m**)—*continued*

Year	Instalment credit for retail sales	Wholesale finance	Other consumer and commercial loans		Total all contracts
			Contracts including charges (a)	Contracts excluding charges (b)	
<i>Balances Outstanding at End of Year</i>					
1977-78 .....	104.0	23.6	56.9	20.4	205.0
1978-79 (c) .....	95.7	24.8	68.1	23.6	212.2
1979-80 .....	86.2	25.2	79.2	26.2	216.7
1980-81 .....	80.2	22.8	96.3	26.1	225.4
1981-82 .....	79.1	25.3	94.1	32.7	231.3
1982-83 .....	74.7	21.5	92.6	31.3	220.1

(a) Includes details of personal loans.

(b) Includes factoring.

(c) Figures for 1978-79 and subsequent years are not comparable with those for earlier years because of changes in the scope and coverage of the statistics.

The value of capital goods (business equipment and plant) leased by finance companies, over a six-year period, is shown in the table below:

**Finance Companies: Business Equipment and Plant on Lease, Tasmania**  
(**\$m**)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Value of goods leased during period .....	32.0	40.0	54.2	58.5	45.6	44.5
Balance outstanding at end of year .....	63.9	87.1	116.6	146.5	148.1	139.3

In the following table the amount financed in respect of instalment credit for retail sales agreements (a single item in previous tables) is further classified by type of commodity.

**Finance Companies: Instalment Credit for Retail Sales, Tasmania**  
(**\$m**)

Year	Amount financed during year					Cash collections and other liquidations during year	Balances outstanding at end of year
	Motor vehicles, etc.			Household and personal goods	Total		
	New	Used	Total (a)				
1977-78 .....	13.7	34.3	55.0	6.2	61.1	83.7	104.0
1978-79 .....	9.6	31.9	48.7	6.8	55.5	85.8	95.7
1979-80 .....	8.4	26.6	39.8	7.1	46.9	81.6	86.2
1980-81 .....	8.5	24.4	37.3	7.0	44.3	70.9	80.2
1981-82 .....	7.8	23.9	35.4	8.9	44.3	67.3	79.1
1982-83 .....	7.4	19.8	30.0	8.4	38.4	65.7	74.7

(a) Total also includes new and used motor cycles, boats, caravans and trailers, motor parts and accessories.

### Instalment Credit for Retail Sales in Tasmania

#### Definitions

The statistics cover operations of all types of instalment credit schemes which relate primarily to the financing of retail sales of goods, whether the credit is advanced by finance companies or other businesses. In general, the item 'instalment credit' is defined as relating to schemes in which repayment is made by regular pre-determined instalments. Types of schemes covered include hire purchase, time payment, budget account and personal loan schemes which relate primarily to financing of retail sales of goods. The term 'retail sales' relates only to retail sales covered by the censuses of retail establishments; other sales of goods to final purchasers (e.g. plant and equipment) are excluded.

Figures for amounts financed exclude interest, hiring charges, insurance, etc. Figures for balances outstanding and collections and other liquidations include these charges. Details are not available of these charges or of other items (e.g. rebates allowed for early payment, late payment charges and bad debts written off) which affect the reconciliation of the three main instalment credit series: amount financed, collections and other liquidations, and balances outstanding.

Statistics of amounts financed are classified by type of goods, defined as follows: (i) motor vehicles, etc.—new and used motor cars and motor cycles, boats, caravans, trailers, and motor parts and accessories; and (ii) household and personal goods—furniture, furnishings and floor coverings, domestic refrigerators, electrical goods, radios, televisions, musical instruments, bicycles, motor mowers, clothing, etc.

**Instalment Credit for Retail Sales, Tasmania (a)**  
(Hire Purchase and other Instalment Credit)  
(\$'000)

Year	Amount financed during period (b)			Balances outstanding at end of period (c)
	Motor vehicles, etc. (d)	Household and personal goods	Total all goods	
Financed by Finance Companies				
1979-80 .....	39 814	7 116	46 930	86 164
1980-81 .....	37 286	6 969	44 255	80 220
1981-82 .....	35 388	8 873	44 261	79 132
1982-83 .....	30 034	8 328	38 362	74 726
Financed by Other Businesses				
1979-80 .....	—	1 048	1 048	11495
1980-81 .....	—	1 142	1 142	1 580
1981-82 .....	—	1 661	1 661	2 072
1982-83 .....	—	1 553	1 553	2 330
Financed by all Business				
1979-80 .....	39 814	8 164	47 978	87 659
1980-81 .....	37 286	8 111	45 397	81 800
1981-82 .....	35 388	10 534	45 922	81 204
1982-83 .....	30 034	9 881	39 915	77 056

(a) Includes time payment, budget account, and personal loan schemes relating primarily to the financing of retail sales.

(b) Excludes hiring charges, interest and insurance.

(c) Includes hiring charges, interest and insurance.

(d) Types of goods included are defined under 'Definitions' preceding the table.

# OTHER PRIVATE FINANCE

## Registered Building Societies

*Permanent Societies:* These societies are both savings and deposit-receiving institutions which advance funds for home building or purchase against the security of first mortgages. Those who invest by taking shares or by making deposits are in a separate category from those who borrow to build or buy a home. The following table summarises the transactions of permanent building societies:

Permanent Building Societies, Tasmania (a)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
	no.	no.	no.	no.	no.	no.
Operating societies .....	5	5	5	4	4	4
Investing shareholders .....	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Borrowers .....	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Loans—Advanced .....	32 677	27 488	42 267	46 772	31 871	19 956
Repaid .....	26 334	28 012	32 766	40 625	45 073	52 266
Subscriptions (b)—Received .....	230 930	252 352	314 539	367 477	424 482	440 563
Withdrawn .....	210 923	235 480	276 659	344 960	420 746	428 484
Liabilities—						
Share capital and subscriptions—						
Non-withdrawable .....	n.p.	n.p.	n.p.	171 478	186 625	190 488
Withdrawable .....	93 355	110 075	136 854			
Reserves .....	2 406	2 890	3 215	3 614	4 182	4 417
Deposits .....	38 135	37 631	49 336	40 299	29 181	20 306
Loans .....	2 524	1 597	2 720	2 120	1 142	792
Other .....	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total .....	137 726	154 430	193 840	218 643	222 633	217 697
Assets—						
Loans on mortgage .....	104 803	117 131	141 075	164 591	172 414	162 432
Land and buildings .....	2 671	3 384	8 208	9 243	10 785	12 541
Government securities .....	29 519	33 722	44 036	44 394	38 843	41 815
Other investments (c) .....						
Cash on hand .....	143	151	253	285	361	345
Other .....	590	42	268	130	230	184
Total .....	137 726	154 430	193 840	218 643	222 633	217 697

(a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown; details relating to the number of shareholders, etc. are in respect of numbers at the end of accounting period ending during the year shown.

(b) Includes unsecured borrowings. (c) Includes current accounts deposits.

## Terminating Building Societies (Co-operative Housing Societies)

*Terminating Building Societies* are societies which, by their rules, are to terminate at a fixed date or when a result specified in their rules is attained. Societies issue members one class of share and require equated monthly instalments towards share capital from members; when a member borrows to build (and only a member may borrow) he is required to pay additional equated monthly instalments, such addition constituting interest only. The regular instalments in respect of share capital are calculated to amount, with interest, to the nominal amount of the member's shares over the life of the society (say 26 or 30 years). If the member takes out shares with a nominal value of \$20 000 then his borrowing ceiling is set at \$20 000—in other words the member takes out, in nominal share capital, the amount which he wishes to borrow for home-building. In effect, the member is contributing to a sinking fund for the liquidation of his loan. The terminating societies are termed 'co-operative'.

The maximum limit of an individual loan has been increased progressively from \$8 000 (prior to August 1969) to \$25 000 (from July 1978). Societies registered prior to 1 July 1978 were bound by previous limits; societies registered after 1 July 1978 may advance up to \$25 000 to each borrower.

The following table summarises the transactions of the terminating building societies operating in Tasmania:

Terminating Building Societies, Tasmania (a)				
Particulars	1978-79	1979-80	1980-81	1981-82
Number of Societies .....	135	143	108	71
Income—	\$'000	\$'000	\$'000	\$'000
Interest on Loans .....	1 096	1 003	1 110	937
Other interest income .....	16	5	4	42
mOther income .....	163	189	218	166
Total .....	1 275	1 197	1 332	1 145
Expenditure—				
Interest paid .....	1 070	981	1 109	970
Other expenses .....	149	158	166	131
Total .....	1 219	1 139	1 275	1 101
Liabilities—				
Amounts paid on ordinary shares (b) .....	6	16	17	17
Accumulated funds (c) .....	396	299	350	317
Loans from:				
Banks .....	1 521	1 672	1 644	2 985
Commonwealth/State Home Builders' Fund (d) .....	13 917	14 632	15 784	13 276
Others .....	247	121	111	93
Other liabilities .....	39	50	40	25
Total .....	16 125	16 790	17 946	16 713
Assets—				
Amount owing on loans (e) .....	15 725	16 473	17 628	16 428
Other .....	400	316	318	285
Total .....	16 125	16 790	17 946	16 713

(a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown.

(b) For actuarial terminating building societies, borrowing members' subscriptions have been offset against 'Amount owing on loans'.

(c) Includes accumulated surpluses and deficits.

(d) Refers to loans made to societies through the Commonwealth/State Housing Agreement.

(e) Net of borrowing members' subscriptions for actuarial societies.

### Credit Unions

The credit unions (co-operative credit societies) are registered under the *Co-operative Industrial Societies Act 1928*. Most credit unions have been established by trade unions (e.g. those serving teachers, hospital employees, etc.) and by church groups. Members contribute capital by taking out shares and making deposits. The aim of the societies is to make loans to members at low rates of interest.

The following table shows the societies' annual transactions:

## Credit Unions, Tasmania (a)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
	no.	no.	no.	no.	no.	no.
Operating societies .....	23	21	19	17	15	14
Shareholders .....	30 773	32 986	37 268	42 960	48 542	53 279
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Liabilities (at end of period)—						
Paid-up capital .....	282	322	362	426	483	528
Reserves, accumulated profits .....	613	977	1 308	1 673	2 102	2 582
Deposits .....	24 692	33 919	46 884	65 439	80 713	93 186
Other .....	746	999	1 998	2 235	3 033	3 259
Total .....	26 333	36 217	50 552	69 774	86 330	99 554
Assets (at end of period)—						
Loans .....	24 013	30 829	43 939	59 743	75 797	83 441
Cash and current deposits .....	1 449	5 388	4 613	6 208	4 559	7 824
Other (b) .....	871		2 000	3 820	5 974	7 819
Total .....	26 333	36 217	50 552	69 774	86 330	99 554

(a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown; details relating to the number of shareholders, etc. are in respect of numbers at the end of accounting period ending during the years shown.

(b) Includes investments and fixed assets.

## Pension and Superannuation Schemes

## Private Schemes

Surveys on an Australia-wide basis have revealed superannuation and/or retiring allowance schemes for employees in the private sector as follows: (i) schemes operated through life insurance offices, friendly societies and other organisations such as unit trusts; (ii) superannuation, pension and retiring allowance funds constituted by businesses; and (iii) direct payments of pensions and/or retiring allowances by the employer.

## Government, Local Government and Semi-Government Schemes

The levels of government operating in Tasmania are: (i) federal; (ii) state; (iii) local authority; and (iv) semi-government authority. In the section that follows, any pension or superannuation scheme affecting employees of the Federal Government or its instrumentalities is excluded.

Government superannuation and pension schemes are included as part of 'Private Finance' because the funds involved do not belong to any government but are actually trust moneys held on behalf of contributors. Employees of the State Government contribute to separately constituted funds to which the State Government also makes contributions. Employees of local government and semi-government authorities are covered either by separately constituted funds or by schemes operated through life insurance offices.

The first pension and gratuity scheme for State public servants, introduced in 1860, was non-contributory and short-lived, being repealed in 1863. A contributory provident fund was established under the *Civil Service Act* 1900 but this scheme was also short-lived and made way for a contributory but State-subsidised scheme established under the *Public Service Superannuation Fund Act* 1905; a year earlier, a distinct fund had been established with similar principles to serve the teaching service. The *Superannuation Act* 1938 established a new fund to serve both public servants and teachers but some pensions continued to be paid from the two funds established in 1904 and 1905. It was not until 1 July 1968 that the residual assets and pension liabilities of these older funds were transferred to the State Superannuation Fund Board. The assets transferred from the 1904 teachers' fund were \$52 990 and from the 1905 public servants' fund, \$17 103.



*State Superannuation Scheme 1971:* In December 1970, the *Superannuation Act 1938* was amended to provide for adjustments to pensions in accordance with movements in the Consumer Price Index. Next, a new scheme was embodied in the *Retirement Benefits Act 1970*, the date of operation being fixed at 1 July 1971. Contributors to the 'old' scheme were given the right of election, i.e. to change to the 'new' scheme or to stay with the 'old'.

The adoption of fixed percentage contributions as the basis for the new scheme overcame the main difficulty with the more traditional type of scheme, namely the prohibitive cost of new units of contributors in the upper age brackets. The other improvement was the provision for automatic adjustment of the pension in accordance with annual Consumer Price Index movements.

*Separately Constituted Funds:* In the table that follows, the operations of the following schemes have been combined and summarised: (i) State Superannuation Fund; (ii) State Retirement Benefits Fund; (iii) Police Provident Fund; (iv) Metropolitan Transport Trust—Retiring Allowance and Staff Pension Funds; (v) Marine Boards' independent schemes; (vi) University of Tasmania—Non-Assurance Subscribers' Accumulation and Additional Benefits Funds; (vii) Hobart Corporation Retiring Allowance Funds; (viii) Milk Board of Tasmania Superannuation Fund; (ix) Miners' Pension Fund; and (x) State Parliamentary Superannuation Scheme.

In the following table, the principal funds included are the State Superannuation Fund and the Retirement Benefits Fund contributed to by all permanent full-time employees of the Public Service, Teaching Service, Transport Commission, Hydro-Electric Commission, Metropolitan Transport Trust, all hospitals subsidised by the State Government, and certain police officers (see notes on Police Provident Fund for details).

State, Local Government and Semi-Government Pension and Superannuation Schemes Operated Through Separately Constituted Funds, Tasmania (a)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Income—						
Contributions—						
Employees .....	9 701	10 563	11 444	12 859	14 768	17 315
Employing authorities .....	9 887	11 772	14 104	16 361	19 220	21 902
Interest, dividends and rent .....	6 033	7 720	9 217	11 062	14 062	18 156
Other income .....	1 060	1 026	624	731	781	320
Total .....	26 680	31 081	35 389	41 016	48 832	57 693
Expenditure—						
Pensions .....	10 410	13 107	15 240	17 914	20 441	24 158
Lump sum payments—						
On retirement or death .....	1 700	1 542	1 657	2 051	2 272	2 448
On resignation or dismissal .....	1 331	1 821	1 706	2 029	2 309	2 762
Other expenditure .....	326	366	345	190	354	1 066
Total .....	13 767	16 839	18 948	22 184	25 376	30 434
Total assets at end of year .....	79 915	94 275	110 420	129 701	153 615	180 924
	no.	no.	no.	no.	no.	no.
Funds in operation .....	13	13	12	12	11	11
Contributors .....	17 893	18 409	18 386	18 704	18 919	19 125
Number of pensioners .....	3 909	3 957	4 332	4 229	4 460	4 621

(a) As there is no uniform accounting period for these funds, financial details are in respect of accounting years ending during the years shown; details relating to the number of contributors, etc. are in respect of numbers at the end of accounting periods ending during the years shown.

*Police Provident Fund:* The Police Provident Fund, a *closed fund* included in an earlier table, had accumulated funds of \$8 702 605 at 30 June 1983. An amendment to the *Superannuation Act* 1938, in 1963, provided that police officers appointed after 31 December 1963 were required to become contributors to the now closed State Superannuation Fund. Police officers appointed prior to 1 January 1964 could continue as contributors to the Police Provident Fund or exercise an option to become contributors to the State Superannuation Fund. Police officers appointed on or after 1 July 1971 contribute to the Retirement Benefits Fund.

*Schemes Operated Through Life Insurance Offices:* A number of local government and semi-government authorities in Tasmania operate pension and superannuation schemes for their employees through life insurance offices. The next table combines and summarises the operations of such schemes. The following are the main authorities concerned: (i) Semi-government—marine boards, fire brigades, Metropolitan Transport Trust (Launceston and Burnie), University of Tasmania, ambulance boards, Society for Blind and Deaf, Museum and Art Gallery, Botanical Gardens; and (ii) Local government—the cities and municipalities. Some authorities, e.g. University, Metropolitan Transport Trust, etc., operate schemes on both bases, i.e., some through separately constituted funds, and others through life insurance offices.

Local and Semi-Government Pension and Superannuation Schemes Operated Through Life Insurance Offices, Tasmania (a)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Income—						
Contributions—						
Employees .....	1 803	2 064	2 385	2 574	2 851	3 334
Employing authorities .....	2 982	3 253	3 796	4 102	4 504	5 059
Surrenders .....	326	363	394	1 015	740	754
Death claims .....	431	155	369	569	1 168	1 255
Matured policies .....	1 224	844	1 379	1 295	1 479	1 857
Other income .....	339	144	742	976	133	68
Total .....	7 104	6 821	9 066	10 530	10 876	12 326
Expenditure—						
Premiums paid to insurance companies	4 295	4 666	5 488	5 897	5 668	6 567
Benefits—						
On death or retirement .....	1 980	1 152	2 329	2 732	2 946	3 198
On resignation or dismissal .....	338	465	438	740	1 780	1 001
Other expenditure .....	35	210	634	770	152	90
Total .....	6 649	6 493	8 889	10 139	10 547	10 856
	no.	no.	no.	no.	no.	no.
Funds in operation .....	20	22	23	23	23	23
Contributors .....	3 549	3 592	3 709	3 613	3 671	3 703

(a) As there is no uniform accounting period for these schemes, financial details are in respect of accounting years ending during the years shown; details relating to the number of contributors, etc. are in respect of numbers at the end of accounting periods ending during the years shown.

#### The Parliamentary Pension and Superannuation Scheme

The *Parliamentary Retiring Allowances Act* 1955 was repealed and replaced by the *Parliamentary Superannuation Act* 1973, effective from 1 July 1973.

The previous scheme was purely contributive. It provided for a full basic rate pension for members who retired, or were defeated, after a minimum qualifying period of 15 years. Lesser rate pensions were calculated pro-rata to the length of service expressed as a fraction of 15 years; for service less than eight years, a member received only a refund of his contributions. The pension applicable was an amount equal to \$12.50 weekly, plus 34.5 per cent of Australian average weekly earnings per employed male unit (see Chapter 10 for details) in each year ended March.

*Parliamentary Superannuation Act 1973*

Administration of the Fund, established under the Act, is vested in the Parliamentary Superannuation Trust which consists of the President of the Legislative Council, the Speaker of the House of Assembly and the Under-Treasurer. Contribution to the Fund is compulsory and is payable at the rate of 12 per cent of the member's parliamentary salary.

The annual rate of pension is calculated as a proportion of basic salary (see the section 'Salaries of Members of Parliament' in Chapter 3), multiplied by the ratio of the total parliamentary salary (excluding allowances) received during the period of service, to the total basic salary payable in respect of that period. The proportion of basic salary used in the calculation varies with the length of service (from 41.2 per cent of eight years service to 70.0 per cent for 20 years or more service). Members who retire or resign with less than eight years service are only entitled to a refund of their contributions.

*Pension Entitlement:* A member is entitled to a pension in the following circumstances:

- (i) if he ceases to be a member, for any reason, after 15 years service; or
- (ii) he has been a member for eight years or more but less than 15 years and resigns for reasons which the Trust certifies to be 'good and sufficient'; or
- (iii) he has been a member for eight years or more but less than 15 years, his term of office expires and he fails to be re-elected for one of several reasons specified in the Act; or
- (iv) he is forced to retire for medical reasons (under these circumstances a member with less than eight years service may be entitled to a pension calculated as though he had served for eight years).

These general provisions of contributions and rate of pension may be varied in cases where the Trust sees fit and which are in accordance with the Act. Any appeal against a decision of the Trust is heard by the Supreme Court of Tasmania.

The next table gives details relating to the State Parliamentary Superannuation Scheme for recent years:

**State Parliamentary Superannuation Scheme, Tasmania**  
(*\$'000*)

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
<i>Income and Expenditure Statement</i>						
<i>Income—</i>						
Members contributions .....	158	172	184	199	219	218
Consolidated Revenue .....	1 107	1 509	1 509	2 018	2 018	518
Interest .....	74	136	253	378	618	912
Other .....	—	—	4	4	1	—
Total .....	1 339	1 817	1 950	2 599	2 856	1 648
<i>Less expenditure—</i>						
Pension payments .....	707	748	893	963	1 050	1 066
Administration expenses .....	1	1	2	1	3	6
Refund of members' contributions .....	—	—	43	31	75	9
Total .....	708	749	938	995	1 127	1 081
Surplus transferred to accumulation Account .....	630	1 069	1 011	1 604	1 728	567
<i>Balance Sheet</i>						
<i>Assets—</i>						
Cash and short term investments .....	639	887	642	1 221	1 607	230
Accrued interest .....	30	58	120	151	223	319
Investments .....	650	1 450	2 650	3 650	4 885	6 735
Total .....	1 319	2 395	3 412	5 022	6 714	7 284
<i>Less liabilities—</i>						
Current liabilities .....	17	24	31	36	—	3
Accumulation account						
Total funds .....	1 302	2 371	3 382	4 986	6 714	7 281

**Further References**

*ABS Publications Produced by the Tasmanian Office*

Friendly Societies, Report on, Tasmania (5603.6), annual.

*ABS Publications Produced by the Canberra Office*

Savings Banks (Preliminary) (5602.0), monthly.

Banking (5605.0), quarterly.

Housing Finance For Owner Occupation, Savings Banks and Trading Banks (5608.0), monthly.

Housing Finance For Owner Occupation, Permanent Building Societies (5610.0), monthly.

Credit Unions: Assets, Liabilities, Income and Expenditure (5618.0), annual.

General Insurance (5620.0), annual.

Instalment Credit for Retail Sales (5631.0), monthly.

## **CHAPTER 19**

### **AUSTRALIAN NATIONAL ACCOUNTS AND ECONOMIC STATISTICS**

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## Chapter 19

# AUSTRALIAN NATIONAL ACCOUNTS AND ECONOMIC STATISTICS

## AUSTRALIAN NATIONAL ACCOUNTS

### Introduction

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy. National accounts statistics therefore provide a medium for describing or analysing the forces that drive and shape the economy.

Estimates of national income and expenditure are compiled by the Bureau and presented in a regular sequence of national accounts publications, in which the first estimates for the year just completed are successively revised and additional detailed tables are issued as further information becomes available. The cycle begins in August with the Budget White Paper *National Income and Expenditure* (5213.0) which gives preliminary estimates for the year just completed and later estimates for the previous four years. The June quarter issue of *Quarterly Estimates of National Income and Expenditure* (5206.0) follows shortly after this with estimates for quarters for the year just completed and for the previous two years. Issues for subsequent quarters may revise the past quarterly estimates as they add additional quarters and may revise annual estimates for some items for the most recent years. The majority of revisions are the result of changes in principles and definitions rather than the correction of errors. *Australian National Accounts, National Income and Expenditure* (5204.0) is the most comprehensive national accounts publication; after estimates for this publication are finalised about February and sent for printing, mimeographed *Preliminary Statements* are issued which make available selected tables in advance.

### Description of National Income and Expenditure Accounts

A brief description of the conceptual basis of national accounts is given in the 1977 *Year Book*, but for a more detailed treatment of the concepts and structure of the Australian National Accounts reference should be made to the 1976-77 issue of *Australian National Accounts, Concepts, Sources and Methods* (Cat. No. 5216.0)

### Australian National Accounts Statistics

The next table gives details of the items on the receipts side of the domestic production account for recent years. Estimates of gross domestic product at average 1979-80 prices are also included. Such estimates are described as *estimates at constant prices* and are designed to remove the direct effect of price changes from the original (current prices) estimates. Estimates at constant prices are largely based on the application of specially constructed price indexes. All estimates shown below are expressed in current prices unless otherwise stated. They have been taken from the 1981-82 issue of *Australian National Accounts, National Income and Expenditure* (5204.0) and are subject to revision.

Gross Domestic Product, Australia *r*

<i>Particulars</i>	1977-78	1978-79	1979-80	1980-81	1981-82
Wages, salaries and supplements .....\$m	51 530	55 446	61 720	71 690	82 532
Gross operating surplus—					
Trading enterprises—					
Companies .....\$m	10 514	11 950	13 446	15 783	16 661
Unincorporated enterprises ..\$m	10 170	13 222	14 548	15 179	16 256
Dwellings owned by persons ..\$m	6 133	7 106	8 013	8 928	10 512
Public enterprises .....\$m	2 056	2 378	2 624	2 839	3 209
Financial enterprises .....\$m	1 681	2 470	2 820	3 302	3 946
Less Imputed bank service charge .....\$m	2 065	2 325	2 765	3 261	3 906
Gross domestic product at factor cost .....\$m	80 019	90 247	100 406	114 460	129 210
Indirect taxes less subsidies .....\$m	10 321	11 978	14 081	16 103	18 366
<b>Gross domestic product \$m</b>	<b>90 340</b>	<b>102 225</b>	<b>114 487</b>	<b>130 563</b>	<b>147 576</b>
Percentage increase in GDP (a) ...	8.6	13.2	12.0	14.0	13.0
GDP at average 1979-80 prices—					
Value .....\$m	108 093	113 427	114 487	118 659	121 620
Percentage increase (a) .....	0.9	4.9	0.9	3.6	2.5
GDP implicit price deflator—					
Index number (1979-80 = 100.0)	83.6	90.1	100.0	110.0	121.3
Percentage increase (a) .....	7.7	7.8	11.0	10.0	10.3
Gross farm product .....\$m	3 933	6 489	7 444	7 058	7 244
Gross non-farm product .....\$m	86 407	95 736	107 043	123 505	140 332

(a) Over previous year.

**Implicit Price Deflators:** Indexes such as the gross domestic product implicit price deflators are obtained (to the base: year used as base for the constant prices series = 100) by dividing aggregate flows of goods and services measured at current prices by the corresponding estimates at constant prices and multiplying by 100. Implicit price deflators have limitations as indicators of price change as they can be affected by the physical composition of the aggregates and components to which they refer (they are *not* 'fixed weight' indexes), and by seasonal factors, and the aggregates are subject to revision. These limitations render implicit price deflators of limited value in assessing quarterly price changes but are seldom of great significance with regard to annual national accounting aggregates.

The next table shows details for items making up the receipts side of the general government income and outlay account. Percentage increases are also shown for major items, the consumer price index (six state capitals combined), and the GDP implicit price deflator. The latter give some perspective to the monetary values (current prices) which are subject to growth due to price increases as well as being subject to *real* growth in the preceding table. In 1981-82 total 'General government receipts' as a proportion of gross domestic product was 34.5 per cent compared with 31.4 per cent in 1975-76.

General Government Income and Outlay Account, Australia: Receipts *r*

<i>Particulars</i>	1977-78	1978-79	1979-80	1980-81	1981-82
<i>Amount (\$ million)</i>					
Income from public enterprises ....	1 386	1 666	1 825	1 857	2 260
Interest, etc., received .....	997	1 035	1 314	1 594	1 722
Indirect taxes .....	10 834	12 605	14 886	17 107	19 497
Direct taxes on income—					
Companies .....	3 072	3 002	3 360	4 639	5 012
Households .....	12 122	12 797	15 040	17 543	21 224

continued next page

General Government Income and Outlay Account, Australia: Receipts *r*—continued

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
<i>Amount (\$ million)</i>					
Withholding taxes .....	118	114	141	161	205
Other direct taxes, fees, fines, etc.	843	850	816	840	967
Total receipts .....	29 372	32 069	37 382	43 741	50 887
<i>Percentage Increase Over Previous Year</i>					
Indirect taxes .....	7.8	16.3	18.1	14.9	14.0
Direct taxes on income—					
Companies, etc. ....	9.6	-2.3	11.9	38.1	8.0
Households .....	9.7	5.6	17.5	16.6	21.0
Total receipts .....	9.7	9.2	16.6	17.0	16.3
Consumer price index (a) .....	9.4	8.2	10.1	9.4	10.4
GDP implicit price deflator .....	7.7	7.8	11.0	10.0	10.0

(a) Weighted average for the six state capital cities (all groups).

## National Accounts Statistics Relating to Tasmania

The following tables are included to provide information relating to household income and private final consumption expenditure within Tasmania during the last six years, together with an analysis of Tasmanian farm income during the same period.

*Household Income* is the total income, whether in cash or kind, received by persons normally resident in Australia. It includes both income received in return for productive activity (such as wages, salaries and supplements, incomes of unincorporated enterprises, etc.) and transfer incomes (such as cash social service benefits, interests, etc.). Household income also includes any property income received by non-profit organisations such as private schools, churches, charitable organisations, etc. That part of farm income accruing to unincorporated enterprises is included under household income.

Household Income: Tasmania *r*  
(\$ million)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
Wages, salaries and supplements .....	1 341	1 455	1 671	1 901	n.y.a.
Income of farm unincorporated enterprises .....	66	115	107	94	98
Income of other unincorporated enterprises .....	170	170	182	187	199
Income from dwellings .....	59	64	70	72	76
Transfers from general government .....	266	291	315	358	424
All other income .....	170	190	220	266	331
Total household income .....	2 072	2 285	2 565	2 878	n.y.a.
Less Income tax payable .....	323	349	408	456	n.y.a.
Other direct taxes fees, fines, etc. ....	19	21	19	20	n.y.a.
Consumer debt interest .....	32	33	37	45	n.y.a.
Transfers overseas .....					
Household disposable income—					
Amount .....	1 698	1 882	2 101	2 357	n.y.a.

*Farm Income* is the difference between the gross value of farm production (after stock valuation adjustment) and total costs (i.e. production costs plus net rent and interest paid and third party insurance transfers) incurred.



**Farm Income: Tasmania r**  
(\$ million)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
Gross value of farm production—					
Wool (including skin wool) .....	37	42	51	51	57
Livestock slaughterings .....	55	92	100	94	90
Grain crops .....	3	5	4	5	6
Fruit .....	15	19	19	19	14
Other crops .....	38	50	48	56	71
Other livestock products .....	39	48	46	49	61
Total .....	187	256	268	274	299
Less Stock valuation adjustment .....	—	—	—	—	—
Less Production costs other than wages and depreciation—					
Marketing costs .....	18	27	27	26	119
Seed and fodder .....	15	14	19	22	
Other costs .....	43	51	56	62	
Gross farm product at factor cost .....	113	165	166	164	180
Indirect taxes less subsidies .....	4	7	7	12	10
Gross farm product at market prices .....	117	172	173	176	190
Less Depreciation .....	11	12	14	17	80
Less Wages, net rent and interest paid and third party insurance transfers .....	34	35	43	52	
Less Indirect taxes less subsidies .....	4	7	7	12	
Farm income .....	68	118	109	95	100
<i>Percentage Increase (of Total) Over Previous Year</i>					
	13.3	73.5	— 7.6	— 12.8	5.3

*Private Final Consumption Expenditure* covers the expenditure on goods and services by persons and expenditure of a current nature by non-profit organisations serving households. Goods and services purchased by businesses or general government are excluded. It excludes the purchase of dwellings and capital expenditure by non-profit organisations.

**Private Final Consumption Expenditure: Tasmania r**  
(\$ million)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	
						Amount	Per cent
Food .....	220	251	290	327	374	419	18.0
Cigarettes and tobacco .....	34	34	39	42	45	50	2.2
Alcoholic drinks .....	78	92	99	109	122	137	5.9
Clothing, etc. ....	121	137	149	156	176	198	8.5
Health .....	80	85	101	108	123	146	6.3
Rent .....	165	194	219	240	266	301	13.0
Gas, electricity, fuel .....	40	46	55	57	63	80	3.4
Household durables .....	132	137	138	138	161	180	7.7
Newspapers, books, etc .....	25	27	30	33	39	43	1.9
All other goods, n.e.i. ....	59	67	82	88	100	113	4.9
Travel and communication .....	219	236	263	308	338	369	15.9
All other services .....	170	188	208	234	258	288	12.4
Total .....	1 343	1 494	1 673	1 840	2 065	2 324	100.0
<i>Percentage Increase (of Total) Over Previous Years</i>							
	15.8	11.2	12.0	10.0	12.2	..	..

**Private Final Consumption Expenditure: States, 1981-82 p**  
(\$ million)

Particulars	NSW and ACT	Vic.	Qld	WA	SA and NT	Tas.	Australia	
							Amount	Per cent
Food .....	5 508	4 375	2 289	1 396	1 491	<b>419</b>	15 478	17.3
Cigarettes and tobacco ..	644	470	254	150	172	<b>50</b>	1 740	2.0
Alcoholic drinks .....	2 096	1 154	790	463	419	<b>137</b>	5 059	5.7
Clothing, etc. ....	2 521	1 751	848	537	621	<b>198</b>	6 476	7.2
Health .....	2 302	1 543	781	474	568	<b>146</b>	5 814	6.5
Rent .....	6 211	3 931	2 109	1 144	1 326	<b>301</b>	15 022	16.8
Gas, electricity, fuel .....	728	666	281	188	185	<b>80</b>	2 128	2.4
Household durables .....	2 691	1 864	1 037	632	691	<b>180</b>	7 095	7.9
Newspapers, books, etc. ....	616	416	205	125	133	<b>43</b>	1 538	1.7
All other goods, n.e.i. ..	1 512	1 181	601	335	392	<b>113</b>	4 134	4.6
Travel and com- munication .....	5 417	3 713	2 170	1 229	1 253	<b>369</b>	14 151	15.8
All other services .....	4 513	2 745	1 510	854	877	<b>288</b>	10 787	12.1
<b>Total .....</b>	<b>34 759</b>	<b>23 809</b>	<b>12 875</b>	<b>7 527</b>	<b>8 128</b>	<b>2 324</b>	<b>89 422</b>	<b>100.0</b>
<i>Percentage Increase (of Total) Over 1980-81</i>								
	13.4	12.9	14.5	13.1	13.3	<b>12.5</b>	13.4	..

## INCOME TAX RATES

### Introduction

As noted in Chapter 4, income tax was first introduced in Australia in the colony of South Australia in 1884 and by 1915 had been adopted by all state governments and the Federal Government. Uniform income taxation throughout Australia was first adopted in 1942 when the Federal Government became the sole authority levying this tax. This continued until 1977-78 when, under new federal-state income tax sharing arrangements, each state was given the right to impose a surcharge or grant a rebate on personal income tax levied in its state. (However, no state government had exercised this option by the close of 1983.)

This section sets out income tax rates that apply to companies and details of the personal income tax system. (The 1977 *Year Book* included an outline of personal income tax in Australia for the period 1954-55 to 1976-77, pp. 654-662.)

**Taxable Income:** Expenses incurred in producing assessable income, certain specified deductions and losses incurred in previous years may be allowable deductions in calculating taxable income.

### Company Income Tax

For the income years 1976-77 to 1982-83, company tax rates were set at 41 per cent of taxable income for non-profit friendly society dispensaries and 46 per cent for all other companies. From the 1983-84 income year, however, dispensaries will be taxed in the same way as other non-profit companies.

It is noted that the tax payable by companies during the financial year 1983-84 is based on income derived during the year ended 30 June 1983 or substituted accounting period.

### *Public Unit Trusts*

*The Income Tax Laws Amendment Bill (No. 3) 1981* amended the income tax law to remove the taxation advantage sought by companies by placing income producing property in the hands of unit trusts. As a result unit trusts created by this practice are now treated as if they were companies for taxation purposes; that is they are subject to

the tax rate applicable to companies generally (now 46 per cent) and distributions to unit holders out of the income and profits of such trusts are taxed in the same way that they would be if they were dividends paid to shareholders of a company.

The new basis for taxing public unit trusts and their unit-holders was first applied for the 1980-81 income year where the trust was established after 11 July 1980. For trusts established on or before 11 July 1980, the amendments will apply from the commencement of the 1983-84 income year.

#### *Taxation (Unpaid Company Tax) Assessment Bill 1982*

This legislation imposes a liability to a recoupment tax on the former owners of shares in companies that were subject to company stripping procedures which rendered those companies unable to pay their income tax liability and also imposes a liability on the promoters of the stripping schemes equal to 20 per cent of the former shareholders' liability.

The legislation applies to schemes entered into between 1 January 1972 and 4 December 1980.

#### *Retention Allowances of Private Companies*

Under Division 7 of the *Income Tax Assessment Act*, a private company becomes liable to additional tax if it does not distribute a prescribed proportion of after-tax taxable income. The purpose of the provision is to maintain, as far as practicable, equity of treatment between shareholders in private companies and persons who operate unincorporated businesses as sole traders or partnerships. Without such a provision, extensive tax minimisation, by retention of profits in the private company's hands, would be expected where the rate of company tax (currently 46 per cent) is well below the maximum marginal rate of tax on individuals (60 per cent for 1983-84).

The 1979-80 Federal Budget increased the retention allowance in respect of trading profits from 60 per cent in 1978-79 to 70 per cent from the 1979-80 income year while the 1982-83 Federal Budget increased the allowance to 80 per cent from the 1982-83 income year, thus placing more funds at the direct disposal of private companies for the purposes of expansion and development. The allowance in respect of property income other than private company dividend income remains at zero.

#### **Personal Income Tax**

The 1977-78 Federal Budget (introduced on 16 August 1977) included provisions for significant changes to the personal income tax system. A new tax rate scale was introduced which was used as the basis for calculating PAYE deductions from 1 February 1978. The general concessional rebate of \$676 was abolished; the only concessional expenditure to attract a rebate was that in excess of \$1 590 at a reduced rate of 32 cents in the dollar. The actual effective rates of tax for 1977-78 were a composite of those for this new scheme and the pre-Budget scheme based on indexation of the 1976-77 tax scale (details are set out in the 1978 *Year Book*.) The maximum amounts that could be included as concessional expenditure for specified types of expenditure, dependant rebates and the sole parent rebate remained unchanged. The marginal ('standard') tax rates applying from 1 February 1978 were: nil (up to an income of \$3 750); 32 cents in the dollar (on each dollar in the range \$3 751 to \$16 000); 46 cents in the dollar (\$16 001 to \$32 000); and 60 cents in the dollar (\$32 001 and over).

For 1978-79 half tax indexation was applied to the tax brackets (see the 1980 *Year Book* for further details). In addition, a tax surcharge was applied—all tax rates (apart from the zero rate) were increased by 1.5 cents in the dollar (i.e. an increase of 4.7 per cent in the standard rate—from 32 cents to 33.5 cents in the dollar).

No tax indexation adjustment was applied for the 1979-80 income year and in addition, a surcharge of 1.07 cents in the dollar was applied to the normal rates (32, 46 and 60 cents in the dollar). (Details are included in the 1980 *Year Book*).

For 1980-81 half indexation was applied to the tax brackets (see the 1981 *Year Book* for further details) resulting in them being indexed upwards by 3.8 per cent.

Half indexation of 3.8 per cent was again applied in the 1981-82 tax brackets (see the 1982 *Year Book* for further details). In addition from 1 November 1981, new arrangements applied for zone rebates. While the basic rebates for Zone A and Zone B remain unchanged, the part of the rebate relating to children increased from 25 per cent to 50 per cent of relevant dependant rebates for people in Zone A and from four per cent to 20 per cent for those in Zone B.

No tax indexation adjustment applies for the 1982-83 and 1983-84 income years but the lower tax brackets and some dependants' rebates were adjusted. In addition, a difference in the method of taxing non-residents of Australia was introduced.

### 1983-84 Personal Income Tax Rates

The following table shows tax scales applying for the 1983-84 income year in respect of a resident of Australia:

Income Tax Rates 1983-84 (a)			
Taxable income (b) bracket	Marginal tax rate (c)  Cents per \$	Gross Tax	
		On income in bracket specified in first column \$	Cumulative (i.e. on higher figure in first column) (d) \$
1- 4 595 .....	—	—	—
4 596-19 500 .....	30	4 471.50	4 471.50
19 501-35 788 .....	46	7 492.48	11 963.98
Over 35 788 .....	60	—	—

(a) As announced in August 1983.

(b) Gross income less expenses incurred in earning that income; subscriptions to trade, business or professional association or union and gifts to approved funds or institutions.

(c) Marginal rate payable in respect of each dollar in the range specified.

(d) Subject to reduction (if applicable) by:

- (i) 30 per cent of total concessional (rebatable) expenditure in excess of \$2 000;
- (ii) rebates in respect of dependants, housekeeper or sole parent;
- (iii) Zone A rebate of \$216 plus 50 per cent of rebates for dependants, including notional rebates for dependent children and students, or Zone B rebate of \$36 plus 20 per cent of rebates for dependants, including notional rebates for dependent children and students;
- (iv) a rebate of 27 cents for each dollar of paid-up capital subscribed to certain petroleum exploration and mining companies;
- (v) a rebate to social security and repatriation pensioners of \$250 reduced by 12½ cents for each \$1 of taxable income over \$5 007.

### Non-Resident Tax Rates

Except for those in receipt of taxable social security and repatriation benefits, non-residents will not receive the benefit of the zero-rated bracket in the above table. Nor will they benefit from the rebates mentioned at (d)(iii) above.

### Medicare Levy Act 1983

This legislation introduces a Medicare levy to coincide with the commencement of the Medicare health scheme on 1 February 1984. The rate of levy applicable is 1 per cent for a full year and an interim rate for the 1983-84 income year of 0.416 per cent (i.e. 5/12ths of the full year rate). A maximum levy applies for any person or married couple of \$291.20 for 1983-84 and \$700 for a full year.

The levy does not apply to taxable incomes below \$6 699 for single persons and \$11 142 for married couples. These thresholds are raised by \$1 100 for each dependant child or student maintained.

Persons entitled to full free medical treatment under other legislation may be exempt from the levy. Where such persons have dependants who are not also exempt 50 per cent of the levy applies.

### *Dependant and Sole Parent Rebates*

#### **Dependant and Sole Parent Rebate 1983-84**

<i>Dependant</i>	<i>Maximum Tax Rebate (a)</i>
	\$
Dependent spouse or daughter-housekeeper (b) .....	1 030
Dependent spouse or daughter-housekeeper .....	830
Housekeeper (c)(b) .....	1 030
Housekeeper (c) .....	830
Parent or parent-in-law .....	749
Invalid relative .....	376
Sole parent (d) .....	780

(a) Reduced proportionately if dependant was only dependent upon the taxpayer for part of the year. Each rebate, except the sole parent and housekeeper rebate, is reduced by one dollar for every four dollars by which the dependant's separate net income exceeds \$282.

(b) Allowable where there is a dependent child under 16 or a student child under 25 in respect of whom rebates would have been allowable but for their replacement by family allowances.

(c) Allowable, subject to certain other conditions, only if no daughter-housekeeper or sole parent rebate claimed.

(d) Allowable to a sole parent if neither a daughter-housekeeper nor a housekeeper rebate is claimed.

### *Concessional Rebates*

For the income years 1975-76 and 1976-77, a concessional rebate of 40 per cent of all allowable concessional expenditure applied, including minimum concessional tax rebates of \$540 and \$610 for 1975-76 and 1976-77, respectively. From the 1977-78 income year the rebate has been reduced to the respective standard rate of tax applied to the amount of concessional expenditure in excess of \$1 590 until 1982-83 and \$2 000 in 1983-84. The maximum amounts of concessional (rebatable) expenditure in respect of qualifying items for the 1983-84 income year are shown in the following table:

#### **Personal Income Tax: Concessional Expenditure Limits, 1983-84**

<i>Particulars</i>	<i>Maximum Rebatable Expenditure</i>
	\$
Rates and land taxes on principal residence .....	300
Direct medical, dental, optical, etc expenses (a)(b) .	no limit
Funeral expenses (a) .....	100 (per dependant)
Life insurance premiums plus superannuation contribution (c) .....	1 200
Education expenses (d) .....	250 (per student)
Self-education expenses .....	250
Adoption expenses .....	no limit
Calls paid on shares in afforestation companies .....	1/3 amount paid

(a) In respect of a resident taxpayer and/or his 'dependants' who are residents.

(b) Net of refunds.

(c) For benefit of the taxpayer, or the spouse or child of the taxpayer.

(d) In respect of the taxpayer's child or other dependant under 25 for whom the taxpayer is entitled to a rebate or notional rebate.

## ECONOMIC CENSUSES AND SURVEYS

## Introduction

Integrated economic censuses of Australian industry sectors commenced in 1968-69. The industry sectors covered initially were mining, manufacturing, electricity and gas, retail trade and wholesale trade. Other sectors subsequently included were agriculture and construction. The transport industry will be surveyed for the first time in 1983-84. The frequency of collection and the method of coverage vary from annual censuses for manufacturing and mining, quinquennial censuses for retail, triennial surveys for agriculture, quinquennial surveys for construction, to wholesale trade where 13 years elapsed before the next collection was undertaken. In the 1972 *Year Book*, Appendix A gave a detailed description of the first Australian Integrated Economic Censuses, conducted by the Australian Bureau of Statistics for the 1968-69 financial year. The various industry sectors currently covered by integrated economic censuses and the Agricultural Finance Survey are each featured in this book; references are: (i) *Agriculture*, Chapter 12; (ii) *Mining*, Chapter 13; (iii) *Manufacturing*, Chapter 14; and (iv) *Retail Trade*, Chapter 16.

In this section are set out the definitions of terms and concepts which apply to the integrated economic censuses. Also, the results of those industry sectors covered by censuses in recent years, together with survey results for the agricultural sector, are brought together to allow inter-sector comparisons to be made. Comparison tables showing the results of the five 1968-69 censuses may be found in Chapter 18 of the 1977 *Year Book*.

## Concepts and Definitions

For the 1968-69 and subsequent economic censuses uniform definitions and concepts have been used. This allows inter-sector comparisons (see later section) and increases the usefulness of the data derived from censuses for economic analysis and market research. Definitions and concepts used in these censuses are summarised below.

**Establishment:** Generally the establishment is the whole of each physical location operated by one enterprise, given that the main activity of the establishment is within scope of the census. Usually only one return is submitted for each establishment *classified to the industry of its main activity*. The principal exception to the 'one return one establishment' rule is where a secondary activity at a location creates gross receipts in excess of a limit (currently \$3.8m). In such cases the secondary activity may have to be reported on a second return appropriate to its industry or its sector. In some other well-defined cases, particularly in the public sector, several locations are combined to form one establishment. Further detail is contained in the publications *Australian Standard Industrial Classification, 1978* and *Statistical Units for the Public Sector* which are available from the ABS. Details for *administrative offices and ancillary units* (such as head offices, storage depots, garages, laboratories, etc.) which serve or administer establishments within the same enterprise but which are located away from them are treated as follows: (i) if only one establishment is served or administered then details are included in the establishment return; or (ii) if more than one establishment is served or administered, details are included on the enterprise return. *Manufacturers' sales branches* located away from the parent manufacturing establishment are treated as ancillary units provided they do not distribute goods to customers from their own holdings of stocks. If the unit does distribute from stocks in this manner then it is treated as an establishment and included in the wholesale sector.

**Electricity and Gas Industries—the Exception:** The single operating location is not suitable as a basis for enterprises engaged in producing or distributing electricity or gas. Therefore for electricity and gas industries, a special treatment was devised—the establishment unit for these industries consists of all locations operated by the enterprise in the one state.

**Enterprise:** This is broadly the operating legal entity and is the key unit for the collection of information. Where a number of legal entities operate as a group, owned or controlled by a single company, the enterprise is not the group as a whole, but each individual operating legal entity in the group.

**Enterprise Group:** Comprises a group of operating legal entities owned or controlled by a single company.

**Value Added:** Common to all sectors covered by integrated economic censuses is the following definition: value added *equals* turnover *plus* increase in stocks *minus* purchases, transfers in and selected expenses. The value added measure can then be aggregated for all establishments and sectors covered by the censuses *without duplication*. In broad terms, value added is the surplus from which establishments pay wages and salaries, interest, depreciation, rents and overheads. The remainder is available for appropriation as profits (after provision for income tax).

**Turnover:** The definition of turnover is as follows:

- (a) In manufacturing and mining censuses:
  - (i) sales of goods produced by the establishment;
  - (ii) sales of goods not produced by the establishment;
  - (iii) transfers out of goods to other establishments of the same enterprise;
  - (iv) bounties and subsidies on production;
  - (v) all other operating income but excluding interest other than hire purchase interest, dividends and sales of fixed tangible assets; and
  - (vi) capital work done for own use or for rental or lease and from 1978-79, rent, leasing and hiring expenses.
- (b) In retail and wholesale trade censuses:
  - (i) sales of goods (owned by the enterprise);
  - (ii) transfers out of goods to other establishments of the same enterprise (applies only to wholesale);
  - (iii) selling and purchasing commissions received (applies only to wholesale);
  - (iv) all other operating income but excluding items specified in (a) (v) above; and
  - (v) goods withdrawn from stock for own use (as fixed tangible assets, or for rental or lease).

**Purchases and Selected Expenses:** Are defined as follows:

- (a) In manufacturing and mining censuses:
  - (i) the value of purchases of materials, fuels, electricity and gas, and wrapping and packaging materials is supplemented by the value of transfers in from other establishments of the enterprise;
  - (ii) purchases of goods for resale are included as well as purchases for own use in production; and
  - (iii) selected expenses comprise repair and maintenance expenses, charges for sub-contract and commission work, outward freight and cartage, motor vehicle running expenses and sales commission payments.
- (b) In retail and wholesale trade censuses:
  - (i) the value of purchases of goods for resale is widened to include purchases for both wholesale and retail trade, no matter whether the establishment is primarily a retailer or a wholesaler;
  - (ii) the value of purchases also includes purchases of materials for manufacturing to cover cases where the retail or wholesale establishment has this secondary activity; and
  - (iii) selected expenses comprise those specified in (a) (iii) above *plus* purchases of wrapping and packaging materials, and electricity and gas (see item (a) (i) in preceding manufacturing and mining group for the reason for this addition).

**Stocks:** Are the total held by the establishment and may therefore include some stocks held for secondary activities, e.g. a manufacturing establishment may have, in its

stocks figure, merchanted goods held or a retail establishment may include in its return, stocks held for wholesaling and manufacturing.

*Transfer Values:* Transfers, both in and out, are confined to transfers of goods; the term is further narrowed to mean transfers between establishments of the same enterprise. Provision exists for recording transfers in all census sectors except retail trade and here the instruction requires purchases to be reported inclusive of transfers in, but net of transfers out. Thus, transfers are taken into account in arriving at value added since transfers out, as just defined, are a part of turnover and transfers in are a part of purchases and selected expenses.

*Employment, Salaries and Wages:* In accordance with the new concept of treating the establishment as a whole, all employees are entered, including those working in administrative offices and ancillary units which serve only the one associated establishment.

*Fixed Capital Expenditure:* The general basis for collection is: purchases of new and second-hand assets less sales of second-hand assets. (For establishments of multi-establishment enterprises, transfers from other establishments of the enterprise are treated as purchases, and transfers to such establishments are treated as sales.) The dissection of fixed capital expenditure comprises expenditure on: (i) motor vehicles; (ii) land and buildings; and (iii) plant and machinery. A further distinction is made between new assets and second-hand assets.

#### *Industrial Classification*

The Australian Standard Industrial Classification (ASIC) (Preliminary 1969 Edition) was adopted for use in the 1968-69 and subsequent economic censuses. The 1978 Edition of ASIC was used for economic censuses from 1977-78. ASIC defines the industries for which statistics are collected in the censuses and allows the scope of the individual censuses to be defined without gaps or duplications between them. It also identifies the statistical units (establishments, enterprises, etc.) and lays down standard rules for identifying and coding them to industries of the classification. A detailed description of ASIC may be found in the Bureau publication *ASIC, Australian Standard Industrial Classification, 1978 Edition Vol. 1: The Classification* (1201.0).

#### *Agricultural Sector Financial Statistics*

From 1968-69, the Bureau has progressively developed agricultural industry finance surveys to obtain: firstly, details of farm expenditure; and, more recently, a wide range of financial data on a compatible basis to that available for industry sectors covered by the integrated economic censuses. The coverage of the 1974-75 and subsequent Agricultural Finance Surveys has consisted of a randomly selected sample of agricultural enterprises (classified to ASIC Subdivision 01). Results of these surveys have been used to calculate estimates covering all agricultural enterprises. A complete agricultural sector economic census of all agricultural enterprises has not been conducted, nor is one proposed, because of the high cost involved.

The concepts and definitions used are basically the same as those outlined above for the integrated economic censuses. Additional notes are set out below:

*Value Added:* When determining the 'increase in stocks' only livestock is taken into account because of its relative significance and the difficulties associated with including other farm stocks.

*Turnover:* Turnover of agricultural enterprises includes proceeds received during the year (which do not necessarily relate to the production of that year) from the sale of crops, livestock and livestock products, and other miscellaneous revenue. Miscellaneous revenue includes both sundry agricultural proceeds (such as proceeds from insurance recoveries, agistment, livestock service, artificial insemination, government relief payments, agricultural services such as contract shearing, harvesting, etc.) and also receipts from any non-agricultural activity of the enterprise.



*Purchases and Selected Expenses:* Include cash payments made during the year for goods and services including marketing expenses; purchases of livestock, feed, fodder, fertiliser, chemicals and veterinary supplies and services; payments for electricity, fuel, water and drainage; payments to contractors; repairs and maintenance to motor vehicles, machinery, equipment, buildings, structures and fences; motor vehicle registration and insurance; insurance of plant; payments for agistment; etc.

#### *Construction Sector Statistics*

A sample survey of private construction establishments was conducted for the first time in 1978-79. The scope of the survey included all private sector establishments and ancillary units predominantly engaged in construction activities, i.e. those establishments classified to the industries in Division E of the ASIC.

At the same time, details were collected from all public sector establishments classified to construction activity but, because of different definitions, the public sector construction activity data cannot be validly aggregated with private sector construction establishment data to give 'total construction'. Construction sector data included in the accompanying tables are, accordingly, in respect of the private sector only.

#### **Comparisons Between Industry Sectors**

Principal items from economic censuses conducted in recent years are shown below:

##### **Selected Industry Sectors, Tasmania**

<i>ASIC classification of establishments and year</i>		<i>Number of establishments at 30 June</i>	<i>Persons employed at 30 June</i>	<i>Wages and salaries</i>	<i>Value added</i>
			<i>no.</i>	<i>\$'000</i>	<i>\$'000</i>
Agriculture (a)—	1976-77 .....	5 768	n.a.	n.a.	77 900
	1977-78 .....	5 793	n.a.	n.a.	87 200
	1980-81 .....	5 685	n.a.	n.a.	115 100
Construction (b)—	1978-79 .....	1 446	7 601	55 703	103 036
Mining (c)—	1977-78 .....	63	4 241	53 870	143 877
	1978-79 .....	66	4 356	63 122	183 963
	1979-80 .....	69	4 527	75 878	247 396
	1980-81 .....	70	4 672	84 699	192 703
	1981-82 .....	63	4 266	90 963	169 688
Manufacturing—	1977-78 .....	599	27 037	258 341	497 979
	1978-79 .....	552	26 329	266 099	549 372
	1979-80 .....	543	26 429	298 196	653 770
	1980-81 .....	558	26 488	346 551	713 445
	1981-82 .....	555	25 256	370 167	713 091
Retail (d)—	1979-80 .....	3 299	19 973	121 341	267 869

(a) Agricultural financial data are based on surveys of agricultural enterprises. The count of units involved is consequently the number of enterprises.

(b) Private sector only. These figures are based on sample surveys and are subject to sampling errors.

(c) Census results exclude 'small' tin miners whose sales were less than \$20 000.

(d) Excludes all bread and milk vendors and single establishment enterprises with turnover of less than \$50 000.

As already noted, value added is a measure that can be aggregated and directly compared for all establishments and industry sectors for which it has been determined, *without duplication*. The following table compares the industry sectors of agriculture, mining and manufacturing on the basis of value added for recent years:

## Selected Industry Sectors, Tasmania: Value Added

Industry sector	1979-80		1980-81		1981-82	
	Value added	Per head of mean population	Value added	Per head of mean population	Value added	Per head of mean population
	\$m	\$	\$m	\$	\$m	\$
Agriculture (a) .....	n.a.	n.a.	115.1	271	n.a.	n.a.
Mining .....	247.4	588	192.7	453	169.7	396
Manufacturing .....	653.8	1 555	713.4	1 678	713.1	1 664
Retail .....	267.9	637	n.a.	n.a.	n.a.	n.a.

(a) These figures are based on sample surveys and are subject to sampling errors. 'Standard errors' indicating the reliability of the estimates are included in the Canberra Office publications *Agricultural Sector, Part IV, Financial Statistics* (Cat. No 7507.0) and *Private Sector Construction Establishments* (Cat. No. 8720.0).

## Further References

*ABS Publications Produced by the Tasmanian Office*

- Retail Establishments and Selected Service Establishments, Details of Operations by Industry Class, Tasmania (8622.6), irregular, 1979-80 released February 1982.
- Retail Establishments and Selected Service Establishments, Industry and Commodity Details for Statistical Retail Areas, Tasmania (8623.6), irregular, 1979-80 released March 1982.
- Retail Establishments and Selected Service Establishments, Hotels and Accommodation, Tasmania (8624.6), irregular, 1979-80, released March 1982.
- Retail Establishments and Selected Service Establishments, Commodity Sales and Service Takings, Tasmania (8625.6), irregular, 1979-80, released July 1982.
- Retail Establishments and Selected Service Establishments, Industry and Commodity Details by Size of Establishments, Tasmania (8626.6), irregular, 1979-80 released August 1982.

*ABS Publications Produced by the Canberra Office*

- ASIC, Australian Standard Industrial Classification, (irregular, 1978 edition released June 1978)—  
Vol 1: The Classification (1201.0)  
Vol. 2: Alphabetic Index of Primary Activities (1202.0)
- Australian National Accounts National Income and Expenditure (Advance Release) (5201.0), annual.
- Australian National Accounts (Preliminary Statement No. 2)—Household Income by States (5202.0), annual.
- Australian National Accounts (Preliminary Statement No. 3)—Gross Domestic Product at Factor Cost by Industry (5203.0), annual.
- Australian National Accounts—National Income and Expenditure (5204.0), annual.
- Quarterly Estimates of National Income and Expenditure (5206.0), quarterly.
- Australian National Accounts—Gross Product by Industry at Current and Constant Prices (5211.0), annual.
- Australian National Accounts—Concepts, Sources and Methods (5216.0).
- Australian National Accounts—Outline of Principal Sources and Methods (5212.0), irregular.
- National Income and Expenditure (a Federal Budget paper) (5213.0), annual.

*Other Publications*

- AUSTRALIA, PARLIAMENT. *Commissioner of Taxation, Reports* (annual). (Parl. Paper, Canberra).
- TREASURER (Federal). *Budget Papers No. 1 and No. 11* (annual). (AGPS, Canberra).
- Inquiry into the Structure of Industry and the Employment Situation in Tasmania*, Report by Sir Bede Callaghan CBE (AGPS, Canberra, 1977). (Commissioned by the Federal Government in December, 1976).

# Appendix A

## STATISTICAL SUMMARY

In the following pages, an historical summary of the more important statistics available that relate to Tasmania is shown. Only brief footnotes have been included and readers should refer to the relevant chapter of the *Year Book* for more detailed definitions. Naturally, the range of statistics for early years is very limited. Also, it should be borne in mind that perfect comparability over long periods of time is difficult to attain due to changes in definitions, scope of statistical collections, etc. While major breaks in series are shown, minor changes to series are not indicated and the statistics should be interpreted with this in mind.

Generally, the first year shown on each page is the earliest for which any series on that page is available. Due to space constraints, earlier details for some series are given only for either every five or ten years. Items included have been arranged in chapter order.

(Chapter 4)

### Aggregate Net Loan Expenditure and Public Debt, Tasmania

Year	Aggregate net loan expenditure to end of year							Public debt at end of year (a) (at mint par of exchange)	Annual interest liability at current rates of exchange	
	Purpose								Amount	Average rate
	Railways and transport	Hydro-electric works	Roads, bridges, harbours	School buildings and University	Housing advances and construction	Other	Total			
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	%
1890 .....	6 508	—	3 354	238	—	2 282	12 382	12 866		
1900 .....	7 820	—	5 352	334	—	2 986	16 492	17 022		
1910-11 .....	8 866	—	7 258	488	—	5 034	21 646	22 156	n.a.	n.a.
1920-21 .....	11 702	3 994	10 390	848	206	12 302	39 442	37 552		
1930-31 .....	13 866	7 692	13 540	1 312	412	16 568	53 390	46 778		
1940-41 .....	14 520	13 018	14 412	1 986	902	19 392	64 230	56 332		
1950-51 .....	20 958	40 448	16 214	4 694	9 946	33 468	125 728	114 066	n.a.	3.1977
1960-61 .....	31 126	181 578	35 076	27 266	29 536	87 422	392 004	354 558	n.a.	4.3845
1961-62 .....	31 418	195 206	39 144	30 450	29 190	96 684	422 092	379 252	17 064	4.3948
1962-63 .....	31 296	208 706	42 942	34 048	28 990	106 621	452 603	404 594	19 523	4.4585
1963-64 .....	34 410	222 905	47 704	38 342	28 577	113 570	485 508	432 311	19 790	4.4634
1964-65 .....	34 984	239 419	51 171	42 395	28 244	122 653	518 866	462 302	21 706	4.5890
1965-66 .....	35 789	255 919	55 593	46 832	27 970	133 325	555 428	491 658	23 987	4.7693
1966-67 .....	36 088	273 919	57 486	50 858	27 692	146 021	592 064	524 918	25 940	4.8432
1967-68 .....	36 910	293 919	58 774	54 964	27 217	162 408	634 192	560 893	27 777	4.8879
1968-69 .....	37 170	314 644	59 563	59 387	27 230	176 586	674 580	599 736	30 040	4.9517
1969-70 .....	40 503	337 769	60 686	64 853	26 469	189 370	719 650	637 407	32 939	5.1163
1970-71 .....	42 169	362 269	61 706	70 544	26 104	204 250	767 042	665 397	36 203	5.3928
1971-72 .....	47 199	388 269	62 636	78 952	31 497	224 757	833 310	705 271	39 202	5.5220
1972-73 .....	58 643	410 629	63 176	90 753	36 837	240 516	900 554	749 583	41 620	5.5300
1973-74 .....	67 609	433 629	63 886	102 567	36 228	261 248	965 167	787 618	45 922	5.8300
1974-75 .....	81 033	456 854	64 504	114 219	35 771	288 832	1 041 213	833 862	49 005	6.4100
1975-76 .....	(b) 15 186	486 554	65 559	132 917	37 475	316 692	1 054 383	753 797	53 748	7.1300
1976-77 .....	13 714	517 554	71 407	156 939	40 694	370 933	1 164 561	811 012	60 437	7.4500
1977-78 .....	14 730	540 554	75 526	178 496	42 558	417 616	1 269 481	870 097	68 233	7.8400
1978-79 .....	15 466	557 204	80 526	197 373	48 754	469 324	1 368 648	922 559	73 604	7.9783
1979-80 .....	16 033	569 879	85 338	215 364	58 922	515 499	1 461 035	969 948	80 205	8.2700
1980-81 .....	16 136	581 179	89 618	230 191	67 759	568 297	1 553 180	1 020 804	91 494	8.9600
1981-82 .....	16 239	604 979	93 156	236 320	78 113	609 374	1 638 181	1 071 606	105 333	9.8300

(a) Expenditure under Commonwealth and State Housing Agreements is excluded from Public Debt.

(b) The Tasmanian Government Railways were taken over by the Australian National Railways Commission from 1 July 1975.

(Chapter 4)

Consolidated Revenue Fund: Revenue and Expenditure, Tasmania (a)  
(\$'000)

Year	Revenue	Expenditure	Budget result	Aggregate net deficit at end of year
1891 .....	1 889	1 827	+ 63	497
1901 .....	1 652	1 741	- 89	487
1910-11 .....	1 940	2 034	- 94	490
1911-12 .....	2 169	2 129	+40	450
1912-13 (b) .....	2 413	2 192	+ 221	229
1913-14 .....	2 476	2 470	+ 6	223
1914-15 .....	2 488	2 768	- 280	503
1915-16 .....	2 753	2 681	+ 72	432
1916-17 .....	2 739	2 826	- 87	519
1917-18 .....	3 006	2 919	+ 87	432
1918-19 .....	3 164	3 289	- 125	557
1919-20 .....	3 630	3 657	- 27	584
1929-30 .....	5 379	5 430	- 51	1 451
1930-31 .....	5 219	5 709	- 490	1 942
1931-32 .....	4 771	5 314	- 543	2 485
1932-33 .....	5 044	5 155	- 110	2 596
1933-34 .....	5 396	5 492	- 95	2 691
1934-35 .....	5 744	5 983	- 238	2 930
1935-36 .....	6 235	6 495	- 259	3 189
1936-37 .....	6 977	6 887	+ 90	3 099
1937-38 .....	7 280	7 266	+ 14	3 086
1938-39 .....	7 230	7 281	- 52	3 138
1939-40 .....	6 111	6 106	+ 5	3 133
1940-41 .....	5 843	6 206	- 363	3 496
1941-42 .....	6 717	6 714	+ 3	3 493
1942-43 .....	6 581	6 800	- 219	3 712
1943-44 .....	6 997	6 937	+ 60	3 651
1944-45 .....	7 313	7 351	- 38	3 690
1945-46 .....	7 867	8 068	- 201	3 891
1946-47 .....	9 014	9 147	- 132	4 023
1947-48 .....	10 156	10 204	- 48	4 071
1948-49 .....	11 288	11 691	- 402	4 473
1949-50 .....	13 882	14 165	- 283	4 756
1950-51 .....	15 831	16 324	- 493	5 249
1951-52 .....	20 386	21 490	- 1 104	6 353
1952-53 .....	22 922	23 526	- 604	6 957
1953-54 .....	26 502	26 840	- 338	7 294
1954-55 .....	29 877	30 614	- 737	8 032
1955-56 .....	34 389	35 792	- 1 403	9 434
1956-57 .....	37 889	39 543	- 1 655	11 089
1957-58 .....	43 210	43 228	- 18	11 107
1958-59 .....	45 520	45 518	+ 2	11 105
1959-60 .....	50 542	50 657	- 114	11 219
1960-61 .....	54 054	54 167	- 113	11 332
1961-62 .....	61 191	61 352	- 161	11 493
1962-63 .....	64 018	64 019	- 1	11 493
1963-64 .....	69 167	69 021	+ 147	11 346
1964-65 .....	76 012	76 465	- 452	11 799
1965-66 .....	84 453	85 585	- 1 132	12 931
1966-67 .....	91 486	93 248	- 1 762	14 693
1967-68 .....	100 463	102 413	- 1 951	16 644
1968-69 .....	109 526	111 540	- 2 015	18 659
1969-70 .....	120 619	121 004	- 385	19 044
1970-71 .....	135 829	138 207	- 2 378	21 422
1971-72 .....	156 432	160 237	- 3 805	25 226
1972-73 .....	181 866	185 998	- 4 132	29 358
1973-74 .....	206 947	210 097	- 3 150	32 508
1974-75 .....	268 522	282 065	- 13 544	46 052
1975-76 .....	322 091	317 947	+ 4 144	41 908
1976-77 .....	396 617	395 033	+ 1 583	41 908
1977-78 .....	444 263	450 706	- 6 443	48 351
1978-79 .....	495 822	492 961	+ 2 861	45 490
1979-80 .....	560 192	563 917	- 3 725	49 214
1980-81 .....	620 307	627 441	- 7 133	56 348
1981-82 .....	683 231	717 628	34 397	90 745
1982-83 .....	764 990	772 735	7 745	98 490

(a) From 1947-48 until 1971-72, the items 'Revenue' and 'Budget result' are shown adjusted according to the Special Grant Adjustment.

(b) System of annual Commonwealth Special Grants introduced.

(Chapter 4)

## Gross and Net Loan Expenditure, Tasmania

Year	Gross expenditure	Net expenditure	Revenue deficit funded (a)	Net loan expenditure per head of population	Year	Gross expenditure	Net expenditure	Revenue deficit funded (a)	Net loan expenditure per head of population
	\$'000	\$'000	\$'000	\$		\$'000	\$'000	\$'000	\$
1900 to 1904-05 (b)	543	473	—	2.68	1949-50	11 742	9 884	48	36.02
1905-06 to 1909-10 (b)	571	519	—	2.78					
1910-11 to 1914-15 (b)	1 147	1 039	—	5.40	1950-51	30 802	27 465	402	96.86
1915-16 to 1919-20 (b)	2 004	1 549	—	7.84	1951-52	34 047	30 047	283	103.28
					1952-53	40 152	26 137	493	86.38
1920-21	6 181	5 435	—	25.68	1953-54	31 816	27 544	1 104	89.00
1921-22	5 377	4 292	—	19.98	1954-55	35 310	29 378	604	93.96
1922-23	3 422	2 307	699	10.68	1955-56	35 213	27 048	338	84.98
1923-24	2 752	1 492	—	6.88	1956-57	23 544	22 039	737	67.88
1924-25	1 907	496	—	2.30	1957-58	23 390	21 666	1 403	33.26
1925-26	2 226	1 138	—	5.30	1958-59	27 610	25 112	1 655	74.16
1926-27	2 290	659	—	3.08	1959-60	29 130	26 443	18	76.84
1927-28	2 068	809	—	3.78					
1928-29	2 059	698	—	3.22	1960-61	33 865	30 611	—	87.38
1929-30	2 932	294	—	1.34	1961-62	32 521	30 088	112	84.60
					1962-63	33 332	30 511	113	84.58
1930-31	(c) 2 921	(c) 1 651	—	7.40	1963-64	35 354	32 905	161	90.32
1931-32	1 319	193	—	0.86	1964-65	35 816	33 352	—	90.65
1932-33	887	- 147	—	-0.64	1965-66	39 411	36 573	—	98.46
1933-34	1 050	238	—	1.04	1966-67	40 161	36 636	306	98.15
1934-35	1 572	723	—	3.16	1967-68	46 054	42 128	1 132	111.62
1935-36	3 717	2 000	678	8.66	1968-69	44 458	40 164	1 762	105.02
1936-37	3 996	1 684	—	7.00	1969-70	49 411	45 069	—	116.67
1937-38	3 785	1 701	—	7.32					
1938-39	3 699	1 479	—	6.22	1970-71	52 079	47 393	—	121.75
1939-40	3 628	1 806	—	7.52	1971-72	73 037	66 268	4 350	169.22
					1972-73	76 813	67 243	2 378	170.67
1940-41	4 231	2 268	363	9.40	1973-74	73 947	64 603	3 805	162.60
1941-42	3 581	1 430	—	5.96	1974-75	90 060	76 056	7 282	189.15
1942-43	3 001	1 002	—	4.14	1975-76	98 818	81 369	—	200.32
1943-44	5 218	3 350	219	13.70	1976-77	126 223	110 178	9 400	269.31
1944-45	3 587	1 806	910	7.32	1977-78	122 544	99 167	1 250	238.67
1945-46	3 540	1 590	—	6.36	1978-79	121 979	92 387	—	219.76
1946-47	5 899	2 725	239	10.70					
1947-48	8 361	6 528	132	24.98	1980-81	116 005	91 793	6 057	214.82
1948-49	11 051	9 013	488	33.82	1981-82	106 831	85 001	7 133	198.22

(a) These amounts are included in both Gross and Net Loan Expenditure. The figures shown are a complete record of funded deficits since 1900.

(b) Annual average for the five-yearly period shown.

(c) Includes \$1 233 000, the amount re-appropriated to provide for certain deferred revenue charges.

(Chapter 5)

## Local Government Finance, Tasmania

Year	Value of ratable property			Revenue Fund—ordinary services and business undertakings		Loan Fund			
	Land value	Total capital value	Assessed annual value	Revenue	Expenditure	Loan raisings	Expenditure	Total debt	Annual interest liability
	(a) (b) (c)	(a) (b)	value	(d)	(d)			(b)	
	\$ million	\$ million	\$ million	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1929-30	46.17	101.40	5.51	1 954	1 956	227	212	6 502	n.a.
1939-40	46.16	109.82	6.10	2 174	2 192	212	230	6 712	300
1949-50	50.73	134.70	9.02	3 694	3 696	1 400	1 423	7 219	267
1950-51	55.86	155.35	10.24	4 283	4 327	1 860	1 594	8 534	304
1951-52	63.43	187.66	11.43	5 357	5 351	2 554	2 558	10 453	372
1952-53	69.93	224.91	12.87	6 024	6 048	2 184	2 166	11 900	444
1953-54	74.31	252.69	13.84	6 641	6 506	2 418	1 758	13 600	533
1954-55	83.58	296.37	15.88	6 972	7 053	2 796	2 408	15 603	639
1955-56	93.84	345.27	15.56	6 386	6 596	2 367	2 730	(e) 15 389	654
1956-57	130.13	495.31	25.42	7 417	7 261	2 310	2 682	16 967	761
1957-58	140.55	553.90	28.23	7 998	7 904	4 024	3 237	20 192	944
1958-59	164.66	653.48	33.41	8 837	8 837	3 685	3 541	22 979	1 111
1959-60	179.03	739.35	37.31	9 781	9 762	5 232	4 671	27 144	1 337

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(Chapter 5)

## Local Government Finance, Tasmania—continued

Year	Value of ratable property			Revenue Fund— ordinary services and business undertakings		Loan Fund			
	Land value (a) (b) (c)	Total capital value (a) (b)	Assessed annual value	Revenue (d)	Expendi- ture (d)	Loan raisings	Expendi- ture	Total debt (b)	Annual interest liability
	\$ million	\$ million	\$ million	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1960-61 .....	185.93	808.21	40.04	10 867	10 924	5 277	5 259	31 285	1 571
1961-62 .....	193.52	870.08	42.89	12 097	11 779	6 159	5 658	36 181	(f) 1 515
1962-63 .....	216.01	942.88	48.62	13 765	13 256	5 268	7 212	39 842	1 897
1963-64 .....	271.83	1 075.09	57.51	14 792	14 654	5 823	7 431	44 063	2 061
1964-65 .....	290.52	1 140.40	61.27	16 250	16 176	6 237	6 354	48 368	2 209
1965-66 .....	316.91	1 202.22	68.54	17 395	17 085	6 512	8 342	52 844	2 442
1966-67 .....	328.50	1 271.87	72.47	19 594	19 068	6 981	8 091	57 611	2 893
1967-68 .....	350.81	1 350.44	86.35	21 235	20 858	8 183	9 364	62 821	3 186
1968-69 .....	374.49	1 452.38	95.57	23 478	22 790	7 633	8 616	66 922	3 496
1969-70 .....	411.72	1 571.96	102.98	25 914	24 816	6 793	7 972	71 854	3 858
1970-71 .....	441.88	1 691.37	107.78	28 236	27 195	6 964	7 494	75 752	4 149
1971-72 .....	454.47	1 768.07	114.86	31 505	30 985	7 326	8 504	79 907	4 534
1972-73 .....	483.44	1 874.17	124.61	37 000	34 552	8 151	9 668	84 781	4 865
1973-74 .....	511.39	1 995.91	147.41	40 376	38 381	8 574	8 803	89 766	5 298
1974-75 .....	619.19	2 317.03	165.47	52 313	51 830	12 260	12 677	97 892	5 951
1975-76 .....	696.26	2 570.15	185.36	68 345	65 118	15 870	19 368	109 655	7 071
1976-77 .....	763.67	2 902.51	218.86	76 376	69 204	17 775	20 579	122 950	8 655
1977-78 .....	1 155.61	3 531.99	260.11	82 607	77 476	18 595	23 135	136 366	10 283
1978-79 .....	1 401.17	4 241.72	344.62	92 130	86 286	19 872	24 120	149 934	12 017
1979-80 .....	397.69	73 561	9 342	59 634	24 482	33 375	12 015	28 150	12 015
1980-81 .....	435.46	78 435	7 822	64 575	24 183	38 021	13 879	32 355	13 879

(a) State Government valuation.

(b) At 30 June.

(c) Prior to 1977-78 figures are 'unimproved capital value'.

(d) Excludes loans.

(e) As from 1955-56, the loan debt of Hobart and Launceston Corporations for tramways has been excluded and treated as a direct liability of the Metropolitan Transport Trust.

(f) From 1961-62 actual interest payments.

(Chapter 6)

## Summary of Population at Census Dates, Tasmania (a) (b)

Particulars	Census Date									
	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981	
Population—										
Males .....	no.	107 743	115 097	129 244	157 129	177 628	187 390	196 442	201 512	208 641
Females .....	no.	106 037	112 502	127 834	151 623	172 712	184 045	193 971	201 356	210 316
Persons .....	no.	213 780	227 599	257 078	308 752	350 340	371 435	390 413	402 868	418 957
Masculinity (males per 100 females) .....	no.	102	102	101	104	103	102	101	100	101
Average annual increase since previous Census—										
Males .....	%	1.0	0.6	0.8	2.8	1.8	1.1	1.0	0.5	0.7
Females .....	%	1.3	0.5	0.9	2.5	1.9	1.3	1.0	0.8	0.9
Persons .....	%	1.1	0.5	0.9	2.7	1.8	1.2	1.0	0.6	0.8
Age distribution of population—										
Under 16 years .....	no.	77 654	73 030	77 483	102 171	123 331	127 379	129 307	124 267	116 942
16 years and under 65 years .....	%	36.3	32.1	30.1	33.1	35.2	34.3	33.1	30.8	28.0
65 years and over .....	no.	126 055	138 515	159 925	183 230	200 001	214 981	230 069	243 885	261 151
	%	59.0	60.9	62.2	59.3	57.1	57.9	58.9	60.5	62.3
	no.	10 071	16 054	19 670	23 351	27 008	29 075	31 037	34 719	42 540
	%	4.7	7.0	7.7	7.6	7.7	7.8	7.9	8.6	9.9
Religions of the population—										
Church of England .....	no.	112 222	105 228	123 158	147 407	159 101	166 023	169 089	158 748	151 207
Methodist .....	no.	27 171	26 470	33 358	38 236	42 236	43 084	42 173	37 107	19 906
Catholic (c) .....	no.	35 465	33 189	39 844	53 042	63 993	71 089	77 250	75 092	78 143
Presbyterian .....	no.	14 796	13 194	12 644	15 607	16 757	17 498	17 281	14 899	11 575
Baptist .....	no.	5 332	4 666	5 374	6 293	7 227	7 759	8 039	7 940	7 965
Congregational .....	no.	4 543	3 963	4 007	4 425	4 193	4 530	4 134	3 266	1 790
Churches of Christ .....	no.	1 935	1 892	2 039	2 267	2 507	2 701	2 500	2 188	2 110
Protestant (undefined) .....	no.	2 271	1 979	1 661	2 157	1 975	1 924	2 423	3 455	5 217
Salvation Army .....	no.	1 357	1 142	1 612	1 815	2 316	2 661	3 176	2 880	3 202
Uniting Church .....	no.	—	—	—	—	—	—	—	—	17 668
Other Christian .....	no.	3 597	3 530	4 518	8 238	11 229	13 058	16 510	18 667	18 631
Total Christian .....	no.	208 689	195 253	228 215	279 487	311 534	330 327	344 395	324 242	317 414
Non-Christian .....	no.	245	87	173	256	268	485	561	779	1 263
Indefinite .....	no.	520	373	797	796	1 766	2 275	993	2 223	11 162
No Religion .....	no.	399	159	506	516	775	2 020	44 464	27 624	36 222
No Reply .....	no.	3 927	31 727	27 387	27 697	35 997	36 328	—	47 998	52 896

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(Chapter 6)

## Summary of Population at Census Dates, Tasmania (a) (b)—continued

Particulars	Census Date								
	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981
Conjugal condition of the population—									
Never married—									
Under 15 years of age .....	no. 73 444	68 590	73 371	97 452	117 299	120 164	121 323	115 665	109 604
15 years of age and over .....	no. 54 297	61 009	53 912	54 890	58 039	64 365	65 213	70 229	80 067
Total never married .....	no. 127 741	129 599	127 283	152 342	175 338	184 529	186 536	185 894	189 671
Married .....	no. 76 482	86 014	114 625	139 801	157 110	167 421	181 855	185 056	189 442
Widowed .....	no. 8 874	10 954	12 933	14 030	15 563	16 959	18 621	19 340	21 362
Divorced .....	no. 118	416	1 319	2 002	2 329	2 526	3 401	5 868	10 855
Not stated .....	no. 565	616	918	577	(e)	(e)	(e)	(e)	(e)
Birthplaces of the population—									
Australia .....	no. 196 268	215 213	247 379	282 491	317 478	335 582	350 150	361 866	371 624
New Zealand .....	no. 1 356	1 201	1 030	1 112	1 128	1 237	1 550	1 801	2 421
United Kingdom and Republic of									
Ireland .....	no. 12 734	9 588	7 123	14 113	16 741	19 101	22 513	22 913	23 289
Netherlands .....	no. 9	11	13	2 340	3 556	3 367	3 183	2 916	3 008
Germany .....	no. 389	238	171	1 794	2 223	2 016	2 009	1 886	1 936
Italy .....	no. 37	92	64	974	1 536	1 448	1 485	1 423	1 343
Other European .....	no. 512	334	325	4 535	5 789	6 033	6 184	5 970	5 530
Other birthplaces .....	no. 2 475	922	973	1 393	1 889	2 651	3 339	4 095	9 806

(a) Full-blood aboriginals excluded from census data prior to 1971.

(b) As recorded. Not adjusted for under-enumeration. (c) Includes Catholic and Roman Catholic.

(d) The Uniting Church was formed in 1978 from members of the Congregational, Methodist and Presbyterian churches.

(e) Conjugal condition was allocated prior to tabulation in all instances where this information was not stated.

(Chapter 6)

## Population; Arrivals and Departures, Tasmania

Year	Estimated Population (a)							Arrivals	Departures (c)	Annual Rate of Increase of Population (d)
	Total at 30 June	Mean: year ended 30 June	Mean: year ended 31 Dec.	Totals at 31 December						
				Persons	Males	Females	Masculinity (b)			
	no.	no.	no.	no.	no.	no.		no.	no.	per cent
1820	n.a.	n.a.	n.a.	5 400	n.a.	n.a.	n.a.	n.a.	n.a.	8.00
1825	n.a.	n.a.	n.a.	14 192	10 979	3 213	342	n.a.	n.a.	21.26
1830	n.a.	n.a.	n.a.	24 279	18 108	6 171	293	n.a.	n.a.	11.35
1835	n.a.	n.a.	n.a.	40 172	28 749	11 423	252	n.a.	n.a.	10.59
1840	n.a.	n.a.	n.a.	45 999	32 040	13 959	230	n.a.	n.a.	2.75
1845	n.a.	n.a.	n.a.	64 291	43 921	20 370	216	n.a.	n.a.	6.91
1850	n.a.	n.a.	n.a.	68 870	44 229	24 641	179	n.a.	n.a.	1.37
1855	n.a.	n.a.	n.a.	69 962	38 680	31 282	124	n.a.	n.a.	0.32
1860	n.a.	n.a.	88 752	89 821	49 653	40 168	124	3 432	2 782	5.12
1865	n.a.	n.a.	93 111	93 967	50 549	43 418	116	3 597	3 691	0.90
1870 (e)	n.a.	n.a.	100 038	100 886	53 517	47 369	113	5 982	5 936	1.44
1875	n.a.	n.a.	104 000	103 739	54 678	49 061	111	6 535	8 083	0.55
1880	n.a.	n.a.	113 648	114 790	60 568	54 222	112	10 411	10 034	2.02
1885	n.a.	n.a.	127 763	128 860	67 712	61 148	111	14 822	15 228	2.33
1890	n.a.	n.a.	143 224	144 787	76 453	68 334	112	29 517	29 086	2.38
1895	n.a.	n.a.	153 701	154 895	80 485	74 410	108	18 767	19 357	1.35
1900	n.a.	n.a.	172 631	172 900	89 763	83 137	108	23 056	25 479	2.21
1905	183 351	183 834	184 478	186 385	95 947	90 438	106	31 116	33 311	1.52
1910	189 807	190 792	191 005	193 803	98 866	94 937	104	35 377	38 159	0.79
1915	195 370	196 320	196 238	197 536	98 653	98 883	100	39 767	44 764	0.38
1920	209 425	208 599	210 350	212 752	107 259	105 493	102	34 829	35 648	1.37
1925	213 991	215 997	215 552	219 364	110 172	109 192	101	40 227	43 757	0.70
1930	219 983	219 269	220 933	225 297	113 505	111 792	102	40 291	41 110	0.48
1935	228 988	229 339	229 867	233 423	118 124	115 299	102	42 470	42 912	0.63
1936	230 104	230 689	231 426	235 773	119 038	116 735	102	49 478	49 452	1.01
1937	233 203	232 651	234 463	239 570	121 136	118 434	102	52 514	51 468	1.61
1938	234 827	235 628	236 328	242 119	122 427	119 692	102	58 113	58 315	1.06
1939	237 419	237 637	238 845	243 256	123 194	120 062	103	(f) 59 330	(f) 60 893	0.47
1940	240 191	240 023	241 134	244 002	123 650	120 352	103	(f) 51 672	(f) 53 644	0.31
1941	239 677	241 009	240 389	242 135	122 153	119 982	102	(f) 49 348	(f) 53 865	-0.77
1942	240 913	240 358	241 087	242 437	122 440	119 997	102	(f) 42 463	(f) 44 834	0.13
1943	242 561	241 704	242 860	244 253	123 067	121 186	102	(f) 20 152	(f) 21 272	0.75
1944	245 616	244 178	245 618	246 889	124 293	122 596	101	n.a.	n.a.	1.08
1945	248 633	246 971	248 596	250 280	125 854	124 426	101	n.a.	n.a.	1.37
1946	251 998	250 309	252 192	254 570	128 007	126 563	101	(g) 24	(f) 159	1.71
1947 (e)	257 078	254 553	257 636	267 936	135 195	132 741	102	(f) 49 920	(f) 40 833	5.25
1948	261 206	261 202	263 445	273 401	138 843	134 558	103	112 666	110 490	2.04
1949	267 062	266 518	270 327	281 343	143 433	137 910	104	117 614	113 232	2.91

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(Chapter 6)

## Population; Arrivals and Departures, Tasmania—continued

Year	Estimated Population (a)							Arrivals	Departures (c)	Annual Rate of Increase of Population (d)
	Total at 30 June	Mean: year ended 30 June	Mean: year ended 31 Dec.	Totals at 31 December						
				Persons	Males	Females	Masculinity (b)			
	no.	no.	no.	no.	no.	no.		no.	no.	per cent
1950	275 902	274 493	278 785	290 333	147 103	143 230	103	127 709	122 333	3.20
1951	286 193	283 526	288 294	301 787	153 721	148 066	104	137 341	129 514	3.95
1952	296 299	293 340	298 361	309 558	157 702	151 856	104	130 583	126 979	2.57
1953	304 080	302 529	306 318	316 465	161 305	155 160	104	127 484	125 812	2.23
1954 (e)	308 752	309 416	311 055	319 218	162 393	156 825	104	126 976	128 424	0.87
1955	314 092	312 694	315 565	324 919	165 356	159 563	104	137 834	137 144	1.79
1956	318 470	318 309	321 039	331 340	168 695	162 645	103	143 104	141 686	1.98
1957	326 130	324 666	328 435	338 807	172 186	166 621	103	143 601	141 310	2.25
1958	333 066	332 046	335 382	343 898	174 465	169 433	103	141 814	141 995	1.50
1959	339 376	338 628	341 423	351 349	178 109	173 240	103	162 761	160 569	2.17
1960	343 910	344 111	346 913	355 969	180 511	175 458	103	182 537	183 513	1.31
1961 (e)	350 340	350 077	353 623	353 258	178 864	174 394	103	186 423	184 165	-0.76
1962	355 668	353 175	355 682	358 087	181 085	177 002	102	185 268	186 023	1.37
1963	360 727	358 180	360 590	362 799	183 330	179 469	102	198 443	199 918	1.32
1964	364 311	362 758	364 554	366 508	185 051	181 457	102	219 930	223 380	1.02
1965	367 905	366 366	367 970	369 608	186 483	183 125	102	248 964	249 617	0.85
1966 (e)	371 436	369 600	371 483	373 309	188 180	185 129	102	257 463	256 068	1.00
1967	375 244	373 321	375 397	377 841	190 369	187 472	102	270 934	271 812	1.21
1968	379 649	377 582	379 916	383 055	192 871	190 184	101	276 798	276 856	1.38
1969	384 893	382 710	385 079	386 998	194 788	192 210	101	296 186	297 069	1.03
1970	387 720	386 665	388 180	390 253	196 363	193 890	101	320 867	323 449	0.84
1971 (e)	398 100	n.a. (g)	n.a. (g)	399 500	200 600	198 900	100	340 163	340 642	r.n.a. (g)
1972	400 300	399 400	400 500	401 900	201 600	200 300	100	356 561	355 224	r.0.60
1973	403 100	401 800	403 200	404 600	202 800	201 800	100	450 707	448 556	r.0.67
1974	406 200	404 600	406 300	408 800	204 600	204 200	100	508 449	502 488	r.1.04
1975	410 100	408 300	410 000	411 500	205 900	205 600	100	510 639	514 278	r.0.66
1976 (e)	412 300	411 300	r.412 400	r.413 700	r.206 900	r.206 800	100	509 356	507 384	r.0.53
1977 r	415 000	413 700	415 100	416 500	208 300	208 300	100	538 665	530 535	0.68
1978 r	417 600	416 500	417 800	419 100	209 600	209 600	100	557 275	559 293	0.62
1979 r	420 800	419 200	420 700	422 200	210 700	211 600	100	576 050	574 790	0.74
1980 r	423 600	422 200	423 600	425 200	211 600	213 600	99	590 680	591 509	0.71
1981 (e)r	427 200	425 300	427 100	428 200	212 900	215 300	99	582 644	586 175	0.70
1982	429 800	428 500	429 700	430 600	p.214 000	p.216 700	99	577 114	581 845	0.56

(a) Prior to 1966 excludes Aborigines.

(b) Number of males per 100 females.

(c) Series of recorded interstate arrivals and departures prepared by State Department of Tourism replaces ABS series from 1972.

(d) The rate of increase during the previous 12 months or, in the years prior to 1936, the average (compound) rate of increase during the previous five years.

(e) Census year. (f) Excludes troop movements. (g) Not available due to change in series.

(Chapter 6)

## Births, Deaths, Marriages and Divorces, Tasmania

Year	Number				Rate per 1 000 of mean population			Deaths under one year of age	
	Births	Deaths	Marriages	Divorces	Births	Deaths	Marriages	Number	Rate per 1 000 live births
	no.	no.	no.	no.					
1820	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1830	460	270	163	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1840	404	501	457	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1845	1 506	697	658	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1850	2 025	1 070	923	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1855	2 948	1 692	1 257	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1860	3 238	1 749	689	n.a.	36.48	19.71	7.76	n.a.	n.a.
1865	3 069	1 263	591	n.a.	32.96	13.56	6.35	n.a.	n.a.
1870	3 054	1 404	670	n.a.	30.53	14.03	6.70	298	97.6
1875	3 105	2 079	689	n.a.	29.86	19.99	6.83	407	131.1
1880	3 739	1 832	840	n.a.	32.90	16.12	7.39	420	112.3
1885	4 637	2 036	1 054	n.a.	36.29	15.94	8.25	522	112.6
1890	4 813	2 118	954	n.a.	33.60	14.79	6.66	508	105.6
1895	4 790	1 811	846	5	31.16	11.78	5.50	391	81.6
1900	4 864	1 903	1 332	4	28.18	11.02	7.72	389	80.0
1905	5 257	1 844	1 365	2	28.50	10.00	7.40	424	80.7
1910	5 586	2 120	1 493	6	29.25	11.10	7.82	568	101.7
1915	5 845	2 015	1 600	7	29.79	10.27	8.15	423	72.4
1920	5 740	2 036	1 999	18	27.29	9.68	9.50	376	65.5
1925	5 218	1 996	1 504	37	24.21	9.26	6.98	288	55.2

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# STATISTICAL SUMMARY

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(Chapter 6)

Births, Deaths, Marriages and Divorces, Tasmania—continued

Year	Number				Rate per 1 000 of mean population			Deaths under one year of age	
	Births	Deaths	Marriages	Divorces	Births	Deaths	Marriages	Number	Rate per 1 000 live births
1930 .....	4 786	1 948	1 450	42	21.66	8.82	6.56	242	50.6
1931 .....	4 762	2 057	1 501	47	21.18	9.15	6.68	219	45.9
1932 .....	4 491	2 022	1 508	33	19.78	8.90	6.64	185	41.2
1933 .....	4 533	2 192	1 629	42	19.93	9.60	7.13	187	41.1
1934 .....	4 470	2 345	1 678	60	19.50	10.23	7.32	189	42.3
1935 .....	4 436	2 353	1 875	87	19.39	10.24	8.16	231	51.8
1936 .....	4 581	2 387	2 073	62	19.79	10.31	8.96	227	49.6
1937 .....	4 841	2 225	2 042	30	20.65	9.49	8.71	202	41.7
1938 .....	4 907	2 288	2 082	109	20.76	9.68	8.81	195	39.7
1939 .....	5 004	2 426	2 264	80	20.95	10.16	9.48	203	40.6
1940 .....	4 994	2 387	2 476	83	20.71	9.90	10.27	176	35.2
1941 .....	5 206	2 575	2 150	84	21.66	10.71	8.94	255	49.0
1942 .....	5 305	2 430	2 431	83	22.00	10.08	10.08	255	42.4
1943 .....	5 597	2 527	2 102	89	23.05	10.41	8.66	227	40.6
1944 .....	5 200	2 494	1 935	115	21.17	10.15	7.88	199	38.3
1945 .....	5 785	2 413	1 868	172	23.27	9.71	7.51	159	27.5
1946 .....	6 847	2 549	2 650	219	27.15	10.11	10.51	207	30.2
1947 .....	7 140	2 363	2 584	210	27.71	9.17	10.03	195	27.3
1948 .....	6 979	2 528	2 428	185	26.49	9.60	9.22	193	27.7
1949 .....	7 110	2 389	2 422	266	26.30	8.84	8.96	170	23.9
1950 .....	7 242	2 466	2 560	152	25.96	8.85	9.18	172	23.8
1951 .....	7 357	2 567	2 607	194	25.52	8.93	9.04	196	26.6
1952 .....	7 916	2 579	2 553	217	26.53	8.64	8.56	172	21.7
1953 .....	7 736	2 551	2 424	210	25.25	8.33	7.91	177	22.9
1954 .....	7 770	2 696	2 512	238	24.98	8.67	8.08	186	23.9
1955 .....	8 089	2 489	2 600	233	25.63	7.89	8.24	189	23.4
1956 .....	8 104	2 513	2 601	197	25.24	7.83	8.10	170	21.0
1957 .....	8 435	2 670	2 507	180	25.68	8.13	7.63	170	20.2
1958 .....	8 568	2 708	2 475	176	25.55	8.07	7.38	167	19.5
1959 .....	8 625	2 780	2 567	222	25.26	8.14	7.52	202	23.4
1960 .....	8 853	2 670	2 713	210	25.52	7.70	7.82	169	19.1
1961 .....	8 892	2 789	2 677	286	25.40	7.89	7.57	151	16.8
1962 .....	8 894	2 870	2 485	249	25.01	8.07	6.99	184	20.7
1963 .....	8 530	2 818	2 579	261	23.66	7.82	7.15	153	17.9
1964 .....	8 252	3 174	2 869	230	22.64	8.71	7.87	166	20.1
1965 .....	7 535	3 043	2 888	280	20.48	8.27	7.85	125	16.6
1966 .....	7 401	3 159	2 946	319	19.92	8.50	7.93	108	14.6
1967 .....	7 547	3 228	3 213	248	20.10	8.60	8.56	130	17.2
1968 .....	8 317	3 284	3 426	303	21.89	8.64	9.02	143	17.2
1969 .....	8 445	3 309	3 532	331	21.93	8.59	9.17	139	16.5
1970 .....	8 185	3 174	3 535	426	21.09	8.16	9.11	116	14.2
1971 .....	8 321	3 295	3 578	432	21.32	8.44	9.17	114	13.7
1972 .....	7 824	3 227	3 426	446	19.94	8.22	8.73	127	16.2
1973 .....	7 326	3 347	3 395	444	18.51	8.46	8.58	137	18.7
1974 .....	7 398	3 484	3 567	536	18.52	8.72	8.93	123	16.6
1975 .....	6 982	3 339	3 242	591	17.26	8.26	8.02	128	18.3
1976 .....	6 702	3 389	3 477	1 761	16.44	8.32	8.53	77	11.5
1977 .....	6 735	3 269	3 166	1 134	16.40	7.96	7.71	99	14.7
1978 .....	6 788	3 271	3 148	1 132	16.41	8.00	7.61	97	14.3
1979 .....	6 757	3 167	3 245	1 167	16.17	7.58	7.79	95	14.1
1980 .....	6 735	3 392	3 433	1 285	15.9	7.8	8.2	79	11.7
1981 .....	7 188	3 320	3 515	1 139	16.83	7.77	8.23	86	12.0
1982 .....	7 002	3 432	3 576	1 391	p16.30	p7.99	p8.32	55	7.9

(Chapter 7)

## Education: Post Secondary and Tertiary, Tasmania.

Year	Vocational Institutions			College of Advanced Education		University	
	Number of colleges	Teaching staff	Students, aggregate enrolment	Teaching staff full-time	Students	Teaching staff full-time	Total students enrolled
1900 .....	1	n.a.	(a) 41	..	..	9	51
1905 .....	4	28	(b) 756	..	..	9	67
1910 .....	4	34	(b) 614	..	..	10	147
1915 .....	5	40	(b) 955	..	..	17	258
1920 .....	4	63	1 152	..	..	23	179
1925 .....	4	64	1 049	..	..	28	173
1930 .....	4	67	950	..	..	29	449
1935 .....	4	83	1 037	..	..	36	229
1940 .....	6	169	2 015	..	..	47	(c) 452
1945 .....	6	206	2 951	..	..	43	503
1950 .....	9	287	5 099	..	..	..	670
1955 .....	(d) 13	(d) 396	(d) 6 151	..	..	(e) 78	783
1960 .....	11	524	7 565	..	..	108	1 332
1961 .....	12	480	6 499	..	..	110	1 460
1962 .....	11	509	6 946	..	..	120	1 572
1963 .....	(f) 10	(f) 539	(f) 7 587	n.a.	n.a.	127	1 691
1964 .....	9	590	7 692	n.a.	n.a.	131	1 863
1965 .....	12	588	7 916	n.a.	n.a.	145	2 083
1966 .....	11	745	7 962	n.a.	n.a.	163	2 346
1967 .....	10	787	8 200	n.a.	n.a.	164	2 443
1968 .....	(g) 7	(g) 845	(g) 8 159	52	1 052	169	2 592
1969 .....	7	774	8 125	52	1 121	193	2 830
1970 .....	7	739	8 069	53	1 134	202	3 119
1971 .....	7	754	6 849	62	1 142	220	3 444
1972 .....	7	566	7 234	115	1 811	248	3 371
1973 .....	6	707	7 519	165	2 003	254	3 263
1974 .....	7	911	9 826	184	2 261	271	3 414
1975 .....	9	866	10 254	203	2 435	280	3 399
1976 .....	10	1 070	11 155	206	2 642	293	3 536
1977 .....	10	967	13 018	201	2 586	298	3 525
1978 .....	11	1 191	14 431	210	2 796	309	3 517
1979 .....	9	1 224	13 507	204	2 827	301	3 435
1980 .....	10	1 274	15 789	196	2 926	301	3 517
1981 .....	10	1 439	19 081	123	2 082	373	5 082
1982 .....	7	1 737	17 522	127	2 180	372	5 210

- (a) Average quarterly enrolments. (b) Individual students.  
(c) Gross enrolments from 1936 to 1949; individual enrolments thereafter.  
(d) Includes schools at which Senior Technical Classes were held.  
(e) Excludes part-time teaching staff from 1952.  
(f) Includes School of Art from 1963 and Conservatorium of Music from 1964.  
(g) Excludes School of Art, Conservatorium of Music.

(Chapter 7)

## Education: Primary and Secondary, Tasmania

Year	Government schools			Non-government schools		
	Number of schools	Teaching staff	Students (a)	Number of schools	Teaching staff	Students (b)
1900 .....	309	(c) 612	24 157	224	n.a.	9 749
1905 .....	343	600	24 043	167	n.a.	8 323
1910 .....	367	677	30 805	124	420	6 278
1915 .....	457	968	35 812	92	322	5 944
1920 .....	470	1 102	39 360	84	317	5 872
1925 .....	515	1 315	39 910	75	312	6 103
1930 .....	508	1 358	40 032	66	326	5 862
1935 .....	516	1 282	39 332	65	324	5 794
1940 .....	431	1 398	37 369	63	329	6 139
1945 .....	356	1 511	35 925	59	321	6 987
1950 .....	332	1 687	46 394	58	375	8 330
1955 .....	291	2 277	60 779	57	424	10 454
1960 .....	287	2 540	65 049	60	544	12 716
1961 .....	289	2 479	66 624	66	570	13 435
1962 .....	286	(d) 2 771	68 346	66	597	13 673
1963 .....	288	2 955	69 633	66	595	14 194
1964 .....	293	3 075	70 643	64	635	14 385
1965 .....	296	3 243	71 615	64	666	14 688
1966 .....	294	3 374	72 461	64	686	14 743
1967 .....	297	3 531	74 265	65	695	14 913
1968 .....	291	3 571	76 109	68	753	14 974
1969 .....	295	3 666	78 339	67	760	14 740

(Chapter 7)

Education: Primary and Secondary, Tasmania—continued

Year	Government schools			Non-government schools		
	Number of schools	Teaching staff	Students (a)	Number of schools	Teaching staff	Students (b)
1970 .....	283	3 756	79 385	68	810	14 623
1971 .....	283	3 796	80 092	68	775	14 415
1972 .....	280	3 845	79 957	66	791	14 098
1973 (e) .....	280	3 937	79 705	65	684	14 237
1974 (e) (f) r .....	245	4 061	73 848	56	693	13 812
1975 (e) r .....	247	4 247	74 332	58	717	13 838
1976 (e) r .....	250	4 241	74 533	61	720	13 825
1977 (e) (g) r .....	250	4 360	74 235	62	729	13 938
1978 (e) r .....	253	4 584	73 676	61	757	14 251
1979 (e) r .....	252	4 752	73 016	60	792	14 401
1980 r .....	257	4 908	72 283	59	831	14 620
1981 r .....	259	4 948	70 486	61	854	14 917
1982 .....	259	4 901	69 142	70	904	15 326
1983 .....	257	5 025	68 387	70	976	15 940

(a) Aggregate enrolment for whole year prior to 1960. From 1960 as at 1 August and excluding adult correspondence students.

(b) Aggregate enrolment for whole year to 1919. From 1920 to 1961 enrolment as at 31 December and thereafter at 1 August.

(c) Includes teachers, pupil-teachers and paid monitors; excludes training college staff, junior monitors, subsidised teachers, etc.

(d) Includes part-time teachers but excludes teachers at special schools from 1962.

(e) Full-time plus full-time equivalent of part-time teachers.

(f) From 1974 figures exclude kindergartens.

(g) From 1977 Government school figures are shown using National Schools Collection definitions.

(Chapter 8)

Commonwealth Social Service Benefits Paid in Tasmania

Year	Family allowances, total amount paid (a)	Maternity allowance		Unemployment benefit		Sickness benefit		Special benefit (b)	
		Claims admitted	Amount paid	Claims admitted	Amount paid	Claims admitted	Amount paid	Claims admitted	Amount paid
	\$'000	no.	\$'000	no.	\$'000	no.	\$'000	no.	\$'000
1912-13 .....	—	3 611	n.a.	—	—	—	—	—	—
1944-45 .....	1 057	5 582	n.a.	—	—	—	—	—	—
1949-50 .....	2 483	7 408	n.a.	151	4	2 840	74	126	8
1954-55 .....	(c) 4 065	7 940	255	471	(d) 32	1 943	(d) 103	106	24
1959-60 .....	4 719	8 985	285	3 186	242	1 883	135	130	39
1960-61 .....	5 484	9 007	296	3 995	229	1 893	134	102	39
1961-62 .....	4 993	8 942	289	8 273	696	2 000	163	93	38
1962-63 .....	5 045	8 560	277	7 141	783	2 099	203	111	44
1963-64 .....	6 113	8 437	272	6 720	750	2 167	215	135	52
1964-65 .....	6 306	7 821	251	5 255	583	2 238	201	122	52
1965-66 .....	6 318	7 578	243	2 742	275	2 040	174	122	57
1966-67 .....	6 912	7 606	243	3 166	228	2 147	190	160	47
1967-68 .....	6 612	7 939	254	3 746	264	1 952	165	99	42
1968-69 .....	6 710	8 373	267	3 984	297	2 070	166	403	55
1969-70 .....	7 416	8 130	259	3 825	360	2 194	199	429	68
1970-71 .....	6 686	8 594	274	4 388	366	2 687	327	388	71
1971-72 .....	7 196	8 211	260	8 974	966	2 964	497	418	79
1972-73 .....	8 185	7 615	241	12 536	2 095	3 295	792	459	128
1973-74 .....	7 212	7 296	230	11 642	3 125	3 975	1 247	574	224
1974-75 .....	6 610	7 225	229	22 088	7 746	4 144	1 692	800	443
1975-76 .....	7 766	7 210	215	30 930	15 256	5 018	2 409	1 760	811
1976-77 .....	31 197	6 729	215	23 981	17 963	4 662	2 380	1 827	979
1977-78 .....	30 968	6 836	213	27 337	23 398	4 284	2 385	1 792	804
1978-79 (e) .....	28 924	n.a.	91	26 294	28 609	3 881	2 024	2 071	1 299
1979-80 .....	30 549	—	—	26 316	29 665	3 554	2 299	2 051	1 487
1980-81 .....	27 765	—	—	28 234	34 658	3 626	2 901	3 463	2 372
1981-82 .....	122 793	—	—	32 147	49 233	3 707	3 595	3 999	2 956
1982-83 .....	39 146	—	—	31 686	78 302	3 750	4 618	3 652	3 428

(a) Known as 'child endowment' up to 1975-76; replaced by increased 'family allowances' from 1 July 1976 in conjunction with abolition of tax rebates in respect of dependent children.

(b) Includes payments to migrants.

(c) Endowment extended to first child from 20 June 1950.

(d) Rates payable were doubled from 22 September 1952.

(e) Maternity allowance ceased 1 November 1978.

(Chapter 8)

## Commonwealth Pensions: Tasmania

Year	Age and invalid pensions						War pensions (a)		Widows' pensions	
	Number of pensioners		Expenditure on pensions		Weekly rate (b)	Operative from	Number in force	Amount paid	Number in force	Amount paid
	Age	Invalid	Age	Invalid						
	no.	no.	\$'000	\$'000	\$	date	no.	\$'000	no.	\$'000
1909-10	3 245	—	159	—	1.00	1.7.1909	—	—	—	—
1914-15	4 528	1 349	223	68	1.00	..	..	..	..	..
1919-20	4 806	1 947	364	145	1.50	13.9.1923	9 551	524	—	—
1924-25	5 856	2 036	503	180	1.75	8.10.1925	10 770	590	—	—
1929-30	7 678	2 456	753	248	2.00	23.7.1931	12 321	695	—	—
1934-35	8 495	2 975	737	263	1.75	26.12.1940	12 523	724	—	—
1939-40	10 614	2 552	1 055	256	2.10	19.8.1943	11 729	808	—	—
1944-45	9 512	2 699	1 271	368	2.70	21.10.1948	12 081	1 103	1 564	207
1949-50	11 402	3 158	2 359	670	4.25	2.11.1950	19 168	2 036	1 384	314
1950-51	11 548	2 885	2 819	724	5.00	1.11.1951	21 407	2 595	1 366	323
1951-52	11 716	2 762	3 457	831	6.00	2.10.1952	22 863	3 121	1 358	376
1952-53	12 380	2 602	4 107	879	6.75	29.10.1953	23 966	3 429	1 380	441
1953-54	12 906	2 605	4 358	908	7.00	..	24 935	3 641	1 371	461
1954-55	13 679	2 681	4 795	967	7.00	27.10.1955	25 731	3 934	1 409	475
1955-56	14 074	2 596	5 605	1 063	8.00	..	26 483	4 035	1 419	537
1956-57	14 847	2 812	5 887	1 183	8.00	24.10.1957	26 751	4 054	1 476	607
1957-58	15 114	2 883	6 527	1 315	8.75	..	27 238	4 424	1 581	677
1958-59	15 434	3 070	6 660	1 419	8.75	8.10.1959	27 621	4 458	1 663	741
1959-60	15 835	3 206	7 471	1 605	9.50	..	28 048	4 832	1 773	833
1960-61	16 552	3 338	(c) 10 101	..	10.00	6.10.1960	28 305	5 166	1 849	940
1961-62	17 522	3 299	11 404	..	10.50	5.10.1961	28 398	4 988	1 912	1 037
1962-63	17 760	3 343	11 717	..	10.50	..	28 214	5 668	1 977	1 084
1963-64	18 303	3 363	12 343	..	11.50	14.11.1963	27 913	6 158	2 109	1 467
1964-65	18 892	3 532	13 184	..	12.00	1.10.1964	27 109	6 214	2 248	1 699
1965-66	19 181	3 444	13 439	..	12.00	..	26 446	6 919	2 327	1 791
1966-67	19 590	3 530	14 574	..	13.00	13.10.1966	25 629	6 645	2 432	1 988
1967-68	20 411	3 548	15 414	..	13.00	..	25 015	6 790	2 588	2 125
1968-69	21 029	3 819	16 768	..	14.00	10.10.1968	24 485	7 622	2 678	2 465
1969-70	23 915	4 051	19 517	..	15.00	9.10.1969	23 807	7 835	2 958	2 927
1970-71	24 894	4 316	21 835	..	15.50	8.10.1970	..	8 230	3 138	3 327
1971-72	25 668	4 498	25 543	..	16.00	8.4.1971	23 254	..	..	..
1972-73	29 107	4 855	33 656	..	17.25	7.10.1971	..	9 094	3 205	3 842
1973-74	31 904	5 087	43 032	..	18.25	4.5.1972	22 512	9 857	3 600	5 136
1974-75	34 269	5 460	60 118	..	20.00	Aug. 1972	21 905	11 176	3 932	6 582
1975-76	35 594	6 091	77 976	..	21.50	Mar. 1973	21 987	13 697	4 103	8 521
1976-77	36 954	6 612	91 788	..	23.00	Aug. 1973	21 474	14 827	4 209	11 221
1977-78	38 204	6 205	107 203	..	26.00	Apr. 1974	20 778	16 637	4 572	12 455
1978-79	38 885	6 427	117 678	..	31.00	Aug. 1974	18 844	18 676	5 001	14 660
1979-80	39 566	6 376	127 382	..	36.00	Apr. 1975	18 127	18 696	5 229	16 621
1980-81	40 000	6 487	142 519	..	38.75	Aug. 1975	17 502	19 389	5 358	18 884
1981-82	40 413	6 615	163 130	..	41.25	Apr. 1976	..	..	..	..
1982-83	40 838	6 767	176 095	..	43.50	Aug. 1976	16 944	21 918	5 230	21 003
					47.10	Apr. 1977	16 681	22 965	5 153	23 160
					49.30	Nov. 1977	16 805	28 887	5 144	24 187
					51.45	May 1978				
					53.20	Nov. 1978				
					57.90	Nov. 1979				

(a) Excludes pensions in respect of the Boer War which are paid by the United Kingdom.

(b) Maximum single rate payable; subject to Means Test.

(c) Separate figures for age and invalid pensions not available from 1960-61.

(Chapter 10)

## Consumer Price Index Numbers, Hobart (a)

Year	Food	Clothing	Housing	Household equipment and operation	Transportation	Tobacco and alcohol	Health and personal care	Recreation and Education	All groups Index no.	Increase per cent (b)
1949-50	13.2	17.6	12.1						14.8	6.5
1954-55	23.9	26.5	18.4						24.0	—
1955-56	25.4	26.8	20.2						25.2	5.0
1956-57	26.5	27.6	22.1						26.7	6.0
1957-58	25.7	28.3	22.8						26.7	—
1958-59	26.1	28.6	23.4						27.1	1.5
1959-60	26.5	28.8	24.6	n.a.	n.a.	n.a.	n.a.	n.a.	27.6	1.8
1960-61	29.5	29.2	26.0						29.1	5.4
1961-62	28.8	29.6	27.1						29.3	0.7
1962-63	28.4	29.8	28.0						29.3	—
1963-64	28.4	29.9	28.8						29.6	1.0
1964-65	30.0	30.3	30.0						30.5	3.0
1965-66	31.6	30.7	30.8						31.6	3.6
1966-67	32.0	31.3	31.7	34.9	31.1	32.2			32.3	2.2
1967-68	34.1	32.0	32.9	36.2	32.4	32.9	n.a.		33.7	4.3
1968-69	33.6	32.7	34.4	37.0	33.6	33.8			34.2	1.5
1969-70	34.0	33.8	35.7	37.5	34.6	34.5	29.1		35.0	2.3
1970-71	35.0	35.0	37.2	38.7	36.1	37.2	29.3		36.3	3.7
1971-72	36.1	37.1	39.4	41.7	39.4	40.1	34.0		38.7	6.6
1972-73	38.3	39.3	41.8	43.2	41.1	43.4	35.7		40.9	5.7
1973-74	45.2	44.5	46.6	46.4	43.4	49.2	40.0		46.0	12.5
1974-75	50.7	53.7	57.4	54.6	51.4	54.5	49.4		53.8	17.0
1975-76	56.7	62.8	68.6	64.2	61.2	66.4	39.3		61.3	13.9
1976-77	64.4	72.7	77.7	70.5	68.6	71.5	71.0	n.a.	70.2	14.5
1977-78	71.2	80.4	83.9	76.8	75.1	74.7	85.8		77.1	9.8
1978-79	80.3	86.7	88.2	82.4	79.7	86.4	82.9		83.1	7.8
1979-80	91.6	93.1	93.1	89.8	90.6	93.1	90.7		91.6	10.2
1980-81	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	9.2
1981-82	108.7	106.4	107.4	110.0	112.8	109.1	120.5		110.0	10.0
1982-83	118.6	112.8	116.3	121.7	126.8	124.0	143.0	109.4	121.8	10.7

(a) Base of each index is year 1980-91 = 100.0 except 'Recreation and education' which is March quarter 1981-82.

(b) Over previous year.

(Chapter 10)

## Employment; Unemployment; Wage Rates and Earnings, Tasmania r

Year	Unemployment				Prescribed weekly wage rates, adult males, Hobart at 31 December		Average weekly earnings per employed male unit for June qtr.	
	Civilian employees at 30 June	Labour force surveys (a)	Persons registered with C'wealth employment service (b)	Persons receiving unemployment benefits (c)	Basic wage (d)	Minimum wage (e)	Amount	Increase (f)
	('000)	('000)	no.	no.	\$	\$	\$	per cent
1939			..	..	7.70	..		
1940			..	..	8.10	..		
1941			..	..	8.50	..		
1942			..	..	9.20	..		
1943			..	..	9.50	..	n.a.	n.a.
1944			..	..	9.40	..		
1945			..	..	9.40	..		
1946			n.a.	83	10.30	..		
1947			243	44	10.70	..		
1948			204	28	11.80	..		
1949	n.a.	n.a.	276	32	12.80	..	15.30	
1950			208	32	16.00	..	17.80	16.3
1951			169	10	19.90	..	21.90	23.0
1952			643	104	23.00	..	26.80	22.4
1953			812	323	24.20	..	28.40	6.0
1954			555	109	24.20	..	30.20	6.3
1955			560	52	24.20	..	33.00	9.3
1956			553	71	25.20	..	34.80	5.5
1957			1 585	410	26.20	..	36.10	3.7
1958			2 231	639	26.70	..	37.00	2.5
1959			2 109	670	28.20	..	37.10	0.3
1960			2 204	522	28.20	..	41.00	10.5

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(Chapter 10)

Employment; Unemployment; Wage Rates and Earnings, Tasmania r—continued

Year	Civilian employees at 30 June	Unemployment			Prescribed weekly wage rates, adult males, Hobart at 31 December		Average weekly earnings per employed male unit for June qtr.	
		Labour force surveys (a)	Persons registered with C'wealth employment service (b)	Persons receiving unemploy- ment benefits (c)	Basic wage (d)	Minimum wage (e)	Amount	Increase (f)
	('000)	('000)	no.	no.	\$	\$	\$	per cent
1961 .....			3 213	1 416	29.40	..	41.20	0.4
1962 .....			3 609	1 778	29.40	..	44.00	6.8
1963 .....	n.a.	n.a.	3 427	1 777	29.40	..	44.50	1.1
1964 .....			2 968	1 399	31.40	..	46.00	3.4
1965 .....			2 235	946	31.40	..	48.50	5.4
1966 .....	144.0	2.8	1 695	457	33.40	..	50.80	4.7
1967 .....	148.3	3.0	2 116	546	34.40	38.15	55.10	8.5
1968 .....	155.1	2.2	2 088	635	35.75	40.45	57.80	4.9
1969 .....	153.7	3.3	2 120	600	36.80	43.00	62.40	8.0
1970 .....	155.9	3.3	1 888	437	36.80	43.00	67.50	8.2
1971 .....	157.4	2.9	2 682	873	39.00	47.00	75.70	12.1
1972 .....	157.1	3.8	3 498	1 697	41.00	51.70	82.20	8.6
1973 .....	161.6	3.0	3 718	2 330	43.50	60.70	92.40	12.4
1974 .....	165.9	3.9	3 310	1 769	46.00	68.70	108.20	17.1
1975 .....	165.0	7.4	6 190	4 439	50.00	83.50	136.80	26.4
1976 .....	164.2	8.1	8 986	7 228	62.90	102.30	153.20	12.0
1977 .....	168.7	9.9	8 786	7 078	72.40	114.00	172.90	12.9
1978 .....	165.8	10.9	11 944	9 757	77.50	121.90	187.70	8.6
1979 .....	172.9	12.4	12 791	10 420	(g) 80.00	(g) 125.80	201.60	7.4
1980 .....	172.5	9.4	13 344	11 121	87.10	137.00	231.70	14.9
1981 .....	171.6	13.4	n.a.	12 929	93.60	147.20	258.30	11.5
1982 .....	167.0	17.3	n.a.	16 263	93.60	168.00	308.10	19.3
1983 .....	164.9	18.9	22 844	20 355	97.60	175.20	332.90	8.0

(a) At August each year.

(b) Persons on register on Friday nearest the end of June who claimed, when registering with the Commonwealth Employment Service, that they were not employed and who were recorded as unplaced. Includes those referred to employers and those who may have obtained employment without notifying the Commonwealth Employment Service and also those receiving unemployment benefit. The Commonwealth Employment Service commenced operating in May 1946. (Source: Department of Employment and Youth Affairs.)

(c) Persons on benefit on last Saturday of June. Unemployment Benefit was first paid in July, 1945. (Source: Department of Social Security.)

(d) The rates shown up to and including 1966 are those in Commonwealth awards. State Wages Boards awards are shown from 1967. The Commonwealth and State rates prior to 1967 were identical except between 1956 and 1959 when the State's rates were slightly higher.

(e) The Tasmanian Wages Boards introduced the concept of the minimum wage in June 1967.

(f) Over June quarter of previous year.

(g) Tasmanian decision of 13 July 1979 following National Wage Case decision of 27 June 1979.

(Chapter 10)

Average Retail Prices (a) of Selected Items of Foodstuffs: Hobart  
(Cents)

Year	Bread (b)	Tea	Sugar	Pota- toes	Butter (fact- ory)	Eggs 1 doz	Bacon rashers	Beef rib without bone	Corned beef (bris- ket) (c)	Mutton (leg) (c)	Mutton chops (loin) (c)	Pork (leg)
	680 g	250 g	2 kg	1 kg	500 g	55 g	250 g	1 kg	1 kg	1 kg	1 kg	1 kg
1901 .....	2.3	6.8	9.3	1.4	12.5	10.6	9.3	11.2	9.3	9.0	10.4	11.7
1906 .....	2.4	6.8	9.3	2.2	11.6	12.9	7.9	11.7	9.3	9.7	10.6	11.2
1911 .....	2.6	6.8	9.7	4.7	12.1	12.1	11.9	11.7	9.3	8.6	10.6	11.2
1916 .....	3.2	7.9	12.8	2.1	17.5	14.4	15.5	41.4	16.8	18.1	19.4	21.4
1921 .....	5.4	9.6	22.0	1.9	23.7	18.8	19.4	22.0	18.1	17.6	20.1	28.7
1926 .....	4.6	12.0	16.3	3.7	21.2	16.2	16.4	20.3	15.7	17.6	20.7	24.0
1931 .....	3.4	12.8	16.8	1.9	17.1	12.0	13.0	16.5	13.0	10.8	14.8	17.9
1936 .....	3.7	12.6	17.9	2.4	15.0	14.9	11.1	15.0	14.6	15.4	16.8	18.1
1941 .....	4.6	16.8	17.9	2.4	18.4	15.9	16.0	19.8	16.5	15.9	17.2	23.1
1946 .....	4.6	12.5	17.9	2.2	19.3	20.5	19.3	24.7	20.1	21.2	21.2	26.0
1951 .....	7.8	21.3	21.2	7.6	27.9	40.8	21.8	42.3	38.1	42.1	40.1	67.2
1956 .....	12.4	40.3	36.6	20.5	51.0	54.1	34.6	73.4	55.6	55.6	43.9	106.3
1957 .....	12.8	39.1	38.4	11.1	50.5	54.8	35.4	72.1	52.9	54.0	42.1	104.1
1958 .....	13.2	38.6	38.4	9.0	49.7	54.6	34.2	74.7	54.5	52.7	39.0	102.5
1959 .....	13.6	38.4	38.4	12.0	50.0	55.0	34.4	79.4	59.3	49.2	33.7	103.8
1960 .....	14.1	37.8	41.0	10.9	51.6	55.0	37.7	92.2	73.2	54.9	41.9	118.8

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# STATISTICAL SUMMARY

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(Chapter 10)

## Average Retail Prices (a) of Selected Items of Foodstuffs: Hobart (Cents)—continued

Year	Bread (b)	Tea	Sugar	Pota- toes	Butter (fact- ory)	Eggs 1 doz	Bacon rashers	Beef rib without bone	Corned beef (bris- ket) (c)	Mutton (leg) (c)	Mutton chops (loin) (c)	Pork (leg)
	680 g	250 g	2 kg	1 kg	500 g	55 g	250 g	1 kg	1 kg	1 kg	1 kg	1 kg
1961 .....	14.5	38.3	42.3	20.2	52.4	57.1	39.5	98.3	85.8	56.2	45.9	119.5
1962 .....	14.9	37.1	42.3	12.7	52.6	56.1	38.5	89.7	74.5	51.8	39.7	113.1
1963 .....	15.2	36.5	42.3	9.3	53.2	57.6	39.5	95.2	76.9	54.7	41.0	123.5
1964 .....	15.3	36.3	42.1	14.8	53.9	56.1	42.8	98.8	79.6	58.6	47.6	130.1
1965 .....	15.7	36.3	41.8	20.5	54.7	60.2	49.6	111.3	87.3	65.7	55.8	136.5
1966 .....	17.0	36.5	41.8	11.3	56.7	63.0	52.7	119.0	94.6	69.2	57.5	140.2
1967 .....	18.0	36.6	46.0	15.5	57.3	65.7	54.9	125.9	100.5	71.4	62.2	145.1
1968 .....	19.1	36.4	49.0	15.2	57.3	62.2	56.3	122.1	138.9	108.5	111.8	149.5
1969 .....	20.1	35.2	49.2	13.4	59.7	68.3	54.6	116.0	135.8	106.3	108.0	147.5
1970 .....	21.3	33.9	49.0	14.1	60.6	67.7	55.6	122.6	138.9	197.6	109.3	147.5
1971 .....	23.5	35.3	48.0	14.5	62.0	64.4	55.2	127.4	144.4	107.4	107.6	148.8
1972 .....	24.9	36.7	48.4	16.3	63.9	67.4	56.9	127.2	149.9	113.3	114.0	151.9
1973 .....	27.0	35.6	47.9	20.5	63.9	75.2	57.6	145.3	175.0	148.8	149.3	171.3
1974 .....	31.2	37.2	48.0	30.4	67.5	58.8	75.6	153.9	201.3	170.9	174.8	220.0
1975 .....	39.2	49.7	52.4	19.6	77.0	93.7	91.9	136.7	180.8	171.5	173.1	256.6
1976 .....	45.1	53.0	56.7	33.7	85.2	109.2	111.6	163.1	201.1	197.1	198.2	302.7
1977 .....	48.8	92.3	63.5	26.6	91.5	123.4	123.0	181.4	218.7	238.9	240.0	326.1
1978 .....	52.0	88.5	68.8	35.8	91.3	128.5	126.5	202.3	247.5	269.8	277.8	344.5
1979 .....	57.0	79.5	85.3	39.5	94.8	138.5	149.5	333.8	379.5	332.8	349.3	415.3
1980 .....	63.8	77.3	95.3	45.0	104.8	147.5	170.5	392.0	441.8	357.5	371.0	464.0
1981 .....	72.0	79.5	102.0	51.5	119.0	161.3	182.5	404.3	447.5	357.5	378.8	490.3
1982 .....	79.5	86.5	115.8	45.3	150.8	169.3	204.8	409.0	441.8	359.5	373.8	540.0

(a) In almost all cases the table units are not necessarily those for which the original price data were obtained. In such cases, prices have been calculated for the table unit.

(b) Prior to 1978, bread delivered, 900 g. (c) From 1968 prices shown are for 'Silverside, lamb (leg), lamb chops (loin)', respectively.

(Chapter 11)

## Building Jobs Approved, Tasmania

Building approvals								
Year	New houses		Other new dwellings		Total new dwellings		Alterations and additions to dwellings	Other building
	No.	Value	No.	Value	No.	Value	Value	Value
		(\$'000)		(\$'000)		(\$'000)	(\$'000) (a)	(\$'000)
1959-60 .....	2 546	16 134	187	926	2 733	17 060		22 099
1960-61 .....	2 273	15 190	152	895	2 425	16 085		30 539
1961-62 .....	2 527	16 486	119	467	2 646	16 953		37 804
1962-63 .....	2 471	16 542	173	814	2 644	17 356		37 416
1963-64 .....	2 648	18 845	165	886	2 813	19 731		34 521
1964-65 .....	2 669	20 209	252	1 413	2 921	21 622		44 872
1965-66 .....	2 428	19 083	218	1 355	2 646	20 438		48 870
1966-67 .....	3 218	25 777	227	1 476	3 445	27 253		53 593
1967-68 .....	3 309	30 083	425	2 522	3 734	32 605		72 019
1968-69 .....	2 694	25 893	438	2 904	3 132	28 797	n.a.	52 291
1969-70 .....	2 656	26 631	781	5 545	3 437	32 176		59 534
1970-71 .....	2 581	26 618	610	4 036	3 191	30 654		67 991
1971-72 .....	2 484	28 430	909	6 773	3 393	35 203		70 083
1972-73 .....	3 058	39 454	768	6 393	3 826	45 847		90 421
1973-74 .....	3 282	51 798	893	8 771	4 175	60 569	797	100 719
1974-75 .....	2 627	51 460	732	9 678	3 359	61 138	1 163	112 736
1975-76 .....	3 380	82 908	1 056	18 715	4 436	101 623	2 326	160 390
1976-77 .....	3 314	89 367	1 088	21 159	4 402	110 526	3 877	200 562
1977-78 .....	2 778	78 138	911	17 959	3 689	96 097	4 817	187 729
1978-79 .....	2 834	83 429	810	17 779	3 644	101 208	5 089	183 416
1979-80 .....	2 511	81 479	804	17 165	3 315	98 644	5 828	195 912
1980-81 .....	2 327	81 713	873	19 992	3 200	101 705	6 950	181 845
1981-82 .....	1 989	72 285	741	18 051	2 730	90 336	7 786	188 493
1982-83 .....	2 057	76 438	670	17 111	2 727	93 549	7 653	163 444

(a) Prior to 1973-74, alterations and additions valued at \$10 000 or more to dwellings were included with the number and value of dwellings.

(Chapter 11)

## Summary of Dwellings at Census Dates, Tasmania

Particulars	Date of Census								
	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981
Dwellings (including hotels, boarding houses, flats, etc.)—									
Occupied .....	45 818	52 484	62 484	78 789	91 528	99 366	110 483	122 573	136 269
Unoccupied .....	2 934	2 421	2 351	5 288	8 582	10 800	13 302	15 786	17 765
Total .....	48 752	54 905	64 835	84 077	99 840	110 166	123 785	138 359	154 034
Average inmates per occupied dwelling .....	4.67	4.34	4.11	3.92	3.84	3.74	3.53	3.29	3.07
Occupied private dwellings according to—									
Class of dwelling—									
Private house (including share) (a) .....	42 028	48 479	58 937	74 244	83 736	90 131	99 401	100 534	119 573
Flat (including apartment) .....	2 404	2 831	461	2 604	2 574	7 058	8 417	21 298	16 025
Other .....	44 432	51 310	61 462	77 647	90 198	98 282	109 603	121 832	135 598
Total .....	44 432	51 310	61 462	77 647	90 198	98 282	109 603	121 832	135 598
Nature of occupancy—									
Owner .....	16 851	20 404	28 377	38 436	42 896	47 685	53 267	58 852	64 740
Purchaser by instalments .....	4 364	3 986	4 140	9 810	19 006	25 597	30 583	38 524	44 977
Tenant .....	19 037	22 734	26 077	26 991	25 938	25 597	30 583	29 638	33 909
Other methods of occupancy (including not stated) .....	4 180	4 186	2 868	2 410	2 358	5 000	5 753	8 910	11 972

(a) Separate house for 1976.

(Chapter 11)

## Value of Building; Commenced, Completed and Under Construction, Tasmania (\$'000)

Year	Building approvals	Building construction								
		Commenced			Completed			Under construction at 30 June		
		New dwellings	Other building	Total all building	New dwellings	Other building	Total all building	New dwellings	Other building	Total all building
1946-47 .....	6 726	3 728	1 708	5 436	2 308	526	2 834	3 614	1 904	5 518
1947-48 .....	8 358	5 256	1 958	7 214	3 492	1 066	4 558	5 532	2 760	8 292
1948-49 .....	11 742	7 960	2 782	10 742	6 042	1 578	7 620	7 670	4 074	11 744
1949-50 .....	16 740	11 702	5 056	16 758	8 426	2 258	10 684	11 368	6 612	17 980
1950-51 .....	21 694	15 000	5 672	20 672	13 508	3 298	16 806	14 250	10 106	24 356
1951-52 .....	20 042	15 360	6 766	22 126	16 414	4 608	21 022	14 504	13 036	27 540
1952-53 .....	15 984	10 664	2 558	13 222	15 252	6 078	21 330	10 608	10 380	20 988
1953-54 .....	21 646	13 552	4 896	18 448	13 520	5 864	19 384	11 532	12 032	23 564
1954-55 .....	25 612	15 244	6 428	21 672	13 092	8 206	21 298	13 992	10 806	24 798
1955-56 .....	25 074	13 842	5 936	19 778	15 138	10 458	25 596	13 230	6 498	19 728
1956-57 .....	30 964	15 138	13 138	28 276	16 434	8 784	25 218	12 420	11 750	24 170
1957-58 .....	27 232	14 980	10 486	25 466	15 844	9 836	25 680	11 866	12 026	23 892
1958-59 .....	27 592	16 662	12 156	28 818	15 986	10 914	26 900	12 742	13 364	26 106
1959-60 .....	39 159	15 834	20 652	36 486	16 570	15 036	31 606	12 026	19 156	31 182
1960-61 .....	30 539	15 936	12 344	28 280	17 206	16 822	34 028	10 912	15 016	25 928
1961-62 .....	37 804	17 026	18 360	35 386	16 630	16 824	33 454	11 136	16 640	27 776
1962-63 .....	37 416	16 668	17 944	34 612	16 892	17 240	34 128	10 912	17 500	28 412
1963-74 .....	34 521	18 944	15 720	34 664	18 070	15 906	33 976	11 764	17 330	29 094
1964-65 .....	44 872	20 922	21 118	42 040	20 060	17 684	37 744	12 628	20 738	33 366
1965-66 .....	48 870	19 200	24 589	43 789	19 010	20 670	39 680	12 761	24 651	37 412
1966-67 .....	53 593	25 869	36 208	62 070	23 230	24 986	48 218	15 394	35 875	51 269
1967-68 .....	72 021	29 791	33 359	63 153	30 078	31 805	61 881	15 095	37 411	52 504
1968-69 .....	52 291	28 011	28 191	56 202	28 142	28 807	56 947	14 634	37 262	51 896
1969-70 .....	59 534	32 326	29 805	62 131	32 170	34 282	66 452	14 675	36 347	51 022
1970-71 .....	67 991	32 233	37 956	70 189	29 275	30 409	59 684	17 906	45 559	63 465
1971-72 .....	70 083	32 219	32 100	64 319	31 699	38 018	69 717	19 262	42 374	61 636
1972-73 .....	90 421	43 328	47 279	90 607	36 190	41 915	78 105	27 418	49 104	76 522
1973-74 (a) .....	100 719	57 579	49 546	107 125	48 259	40 687	88 946	38 416	58 947	97 363
1974-75 .....	112 736	59 641	53 539	113 180	58 182	41 311	99 493	42 436	73 883	116 319
1975-76 .....	160 390	94 481	62 360	156 840	77 130	67 979	145 109	65 067	75 427	140 494
1976-77 .....	200 562	100 636	77 938	178 574	102 888	71 674	174 563	67 915	85 758	153 674
1977-78 .....	187 729	95 941	96 314	192 255	105 701	87 319	193 019	61 583	99 732	161 316
1978-79 .....	183 416	105 265	106 141	211 406	99 460	74 968	174 427	73 161	133 694	206 854
1979-80 .....	195 912	95 771	82 821	178 591	106 452	111 180	217 633	62 278	117 250	179 529
1980-81 (b) .....	181 845	109 700	99 727	209 400	111 600	122 815	234 400	56 800	109 916	166 700
1981-82 .....	188 493	88 800	92 800	181 600	93 500	98 000	191 400	48 500	106 100	154 500
1982-83 .....	163 444	80 900	78 500	159 500	79 000	111 100	190 100	49 500	71 300	120 700

(a) Alterations and additions to dwellings valued at \$10 000 and over are included with the value of dwellings up to 1972-73 but excluded thereafter; from 1973-74 the value of alterations and additions to dwellings valued at \$10 000 and over is included with 'other building'.



(Chapter 12)

Land Settlement: Land Utilisation, Tasmania  
(<sup>000</sup> ha)

Land settlement (a)					Land utilisation on rural establishments				
Year (b)	Land		Crown land		Year	Area under		Balance of area	Total area of rural estab.
	Alienated	In process of alienation	Leased or licensed (c)	Other		Crops (d)	Sown grasses (d)		
1860	1 242				1860-61	62			
1870	1 540				1870-71	64			
1880	1 713				1880-81	57			
1890	1 900		293	4 640	1890-91	64	81		
1900	1 957		513	4 364	1900-01	91	124	1 782	1 996
1910	1 996	447	591	3 799	1910-11	116	200	1 862	2 178
1920	2 121	390	920	3 402	1920-21	120	267	2 216	2 603
1930	2 315	219	1 122	3 177	1930-31	108	305	2 241	2 654
1931	2 323	209	1 075	3 227	1931-32	100	262	2 265	2 627
1932	2 331	203	1 057	3 243	1932-33	113	262	2 294	2 669
1933	2 337	197	1 061	3 238	1933-34	117	272	2 313	2 701
1934	2 349	189	1 094	3 201	1934-35	118	291	2 348	2 757
1935	2 358	180	1 104	3 191	1935-36	98	292	2 414	2 805
1936	2 366	179	1 074	3 215	1936-37	107	304	2 362	2 773
1937	2 372	177	1 115	3 170	1937-38	103	309	2 322	2 734
1938	2 379	175	1 090	3 189	1938-39	98	308	2 336	2 743
1939	2 385	175	1 053	3 196	1939-40	104	311	2 328	2 743
1940	2 392	171	1 098	3 172	1940-41	103	313	2 282	2 698
1941	2 400	169	1 129	3 135	1941-42	114	318	2 316	2 748
1942	2 411	163	1 113	3 146	1942-43	121	n.a.	n.a.	2 641
1943	2 418	162	1 140	3 113	1943-44	136	164	2 287	2 587
1944	2 427	168	1 134	3 104	1944-45	139	165	2 331	2 635
1945	2 439	165	1 123	3 107	1945-46	132	234	2 256	2 622
1946	2 448	161	1 110	3 115	1946-47	123	230	2 237	2 590
1947	2 460	157	1 100	3 116	1947-48	112	223	2 167	2 502
1948	2 473	153	1 087	3 121	1948-49	112	268	2 098	2 478
1950	2 486	148	1 134	3 065	1949-50	118	308	2 169	2 594
1951	2 496	145	1 080	3 112	1950-51	122	322	2 176	2 621
1952	2 514	142	1 108	3 069	1951-52	124	237	2 155	2 605
1953	2 525	139	1 111	3 058	1952-53	130	326	2 198	2 654
1954	2 534	137	1 055	3 107	1953-54	142	336	2 156	2 635
1955	2 516	134	1 018	3 136	1954-55	132	363	2 177	2 672
1956	2 554	126	1 010	3 143	1955-56	137	400	2 145	2 682
1957	2 561	127	655	3 490	1956-57	122	424	2 088	2 634
1958	2 568	84	623	3 558	1957-58	122	458	2 070	2 649
1959	2 575	81	615	3 562	1958-59	144	461	2 055	2 660
1960	2 584	77	618	3 554	1959-60	135	491	2 009	2 635
1961	2 591	86	626	3 531	1960-61	153	487	1 995	2 635
1962	2 597	80	606	3 551	1961-62	155	508	1 988	2 651
1963	2 602	80	586	3 565	1962-63	165	515	1 919	2 599
1964	2 670	89	628	3 446	1963-64	158	552	1 871	2 581
1965	2 679	83	595	3 476	1964-65	167	576	1 855	2 598
1966	2 677	84	540	3 531	1965-66	158	622	1 849	2 629
1967	2 692	100	535	3 506	1966-67	181	628	1 825	2 633
1968	2 692	93	478	3 571	1967-68	170	680	1 813	2 663
1969	2 693	96	465	3 579	1968-69	193	618	1 776	2 667
1970	2 697	100	442	3 594	1969-70	169	737	1 732	2 637
1971	2 702	99	381	3 651	1970-71	172	747	1 712	2 631
1972	2 697	100	274	3 760	1971-72	147	772	1 688	2 607
1973	2 729	133	248	3 723	1972-73 (f)	80	856	1 656	2 592
1974	2 731	135	236	3 728	1973-74	74	920	1 567	2 561
1975	2 755	159	223	3 693	1974-75	67	921	1 504	2 492
1976	2 751	154	229	3 696	1975-76 (g)	60	935	1 464	2 459
1977	2 743	146	163	3 778	1976-77 (g)	65	904	1 340	2 308
1978	2 517	120	165	4 028	1977-78	70	910	1 302	2 281
1979	2 494	96	148	4 092	1978-79	80	904	1 247	2 232
1980	2 487	90	n.a.	n.a.	1979-80	78	895	1 256	2 229
1981	2 486	90	n.a.	n.a.	1980-81	84	903	1 234	2 220
1982	n.a.	n.a.	n.a.	n.a.	1981-82	90	910	1 168	2 168

(a) Area of State, 68 300 square kilometres.

(b) At 31 December until 1948; at 30 June for 1950 and subsequent years.

(c) Excludes areas under pulpwood concessions and exclusive forest permits.

(d) Area of sown grasses cut for hay, seed and green fodder is included under 'crops'.

(e) Not available on a comparable basis.

(f) From 1972-73 area of sown grasses cut for hay, seed and green fodder are included under 'sown grasses'.

(g) Not strictly comparable with earlier years due to changes in definition of a 'rural establishment'.

(Chapter 12)

## Area and Production of Principal Crops, Tasmania

Year	Barley for grain			Oats for grain			Wheat for grain			Blue peas		
	Area	Total production	Yield per hectare	Area	Total production	Yield per hectare	Area	Total production	Yield per hectare	Area	Total production	Yield per hectare
	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes
1860-61	2 524	2 877	1.14	12 263	16 844	1.37	26 891	38 267	1.42			
1870-71	3 082	3 676	1.19	12 523	12 568	1.00	23 222	24 240	1.04			
1880-81	3 358	3 844	1.14	8 034	7 990	0.99	20 243	20 271	1.00			
1890-91	1 771	2 269	1.28	8 393	9 444	1.13	13 133	17 378	1.32	n.a.	n.a.	n.a.
1900-01	1 822	2 657	1.46	18 240	25 580	1.40	20 973	30 011	1.43			
1910-11	2 119	3 234	1.53	25 854	37 515	1.45	21 142	30 290	1.43			
1919-20	2 547	2 739	1.08	19 500	22 587	1.16	4 653	5 773	1.24	5 060	4 589	0.91
1920-21	2 489	3 667	1.47	20 426	27 530	1.35	11 446	15 294	1.34	3 476	4 945	1.42
1921-22	2 930	3 794	1.29	22 113	28 066	1.27	11 325	15 599	1.38	4 182	5 212	1.25
1922-23	2 309	3 455	1.50	23 801	30 450	1.28	10 216	15 394	1.51	3 532	4 377	1.24
1923-24	1 712	2 151	1.26	20 825	24 723	1.19	5 869	8 260	1.41	2 927	4 346	1.48
1924-25	1 218	1 153	0.95	18 686	19 381	1.04	5 242	6 254	1.19	3 112	3 362	1.08
1925-26	2 114	2 059	0.97	14 869	15 191	1.02	7 726	10 692	1.38	3 324	2 891	0.87
1926-27	2 293	3 405	1.48	19 571	24 673	1.26	9 386	14 513	1.55	3 043	4 055	1.33
1927-28	2 064	3 214	1.56	17 381	25 452	1.46	8 531	20 896	2.45	3 672	5 631	1.53
1928-29	1 867	2 252	1.21	15 217	18 389	1.21	9 134	12 306	1.35	3 960	4 624	1.17
1929-30	2 806	3 795	1.35	15 807	21 365	1.35	6 801	10 158	1.49	4 097	6 031	1.47
1930-31	2 506	3 832	1.53	14 536	19 141	1.32	7 732	10 581	1.37	2 859	4 060	1.42
1931-32	3 390	2 721	0.80	7 451	6 488	0.87	4 744	4 944	1.04	2 439	2 079	0.85
1932-33	3 478	4 808	1.38	12 404	15 059	1.21	8 492	11 704	1.38	3 687	5 688	1.54
1933-34	3 173	3 915	1.23	12 626	15 532	1.23	9 752	15 153	1.55	5 663	6 592	1.16
1934-35	2 339	3 989	1.71	14 816	19 168	1.29	6 740	8 311	1.23	5 283	4 722	0.89
1935-36	2 115	2 107	1.00	9 683	10 123	1.05	4 210	5 027	1.19	4 116	3 430	0.83
1936-37	2 811	5 470	1.95	8 884	13 659	1.54	8 627	15 430	1.79	2 613	3 912	1.50
1937-38	3 762	6 958	1.85	13 128	18 767	1.43	8 531	14 216	1.67	1 882	2 707	1.44
1938-39	3 518	4 731	1.34	10 049	11 727	1.17	3 986	5 548	1.39	1 787	2 050	1.15
1939-40	3 125	4 446	1.42	9 352	9 626	1.03	3 033	2 911	0.96	2 113	3 407	1.61
1940-41	2 286	3 349	1.47	7 099	7 569	1.07	3 253	3 794	1.17	3 830	5 237	1.37
1941-42	2 153	2 672	1.24	11 043	15 248	1.38	2 596	3 924	1.51	7 485	8 452	1.13
1942-43	1 104	1 428	1.29	5 325	5 310	1.00	1 671	1 982	1.19	10 989	10 961	1.00
1943-44	1 391	2 150	1.55	3 943	5 438	1.38	1 958	3 301	1.69	15 176	15 785	1.04
1944-45	2 189	3 616	1.65	5 977	7 630	1.28	1 551	2 504	1.61	8 828	13 014	1.47
1945-46	2 730	2 803	1.03	5 656	5 120	0.91	2 016	1 801	0.89	9 420	7 922	0.84
1946-47	2 532	3 538	1.40	9 181	10 825	1.18	3 051	3 763	1.23	4 773	6 364	1.33
1947-48	3 298	4 961	1.50	6 910	6 548	0.95	3 147	3 195	1.02	2 783	3 938	1.42
1948-49	2 966	4 728	1.59	4 734	4 756	1.00	2 779	4 211	1.52	2 625	3 999	1.52
1949-50	1 759	2 975	1.69	9 232	10 499	1.14	2 215	3 440	1.55	3 101	3 955	1.28
1950-51	1 320	2 061	1.56	9 486	7 802	0.82	2 152	2 564	1.19	3 395	4 630	1.36
1951-52	1 716	3 400	1.98	10 740	10 803	1.01	1 458	2 541	1.74	3 078	5 338	1.73
1952-53	3 253	4 930	1.52	8 114	5 197	0.64	2 707	4 227	1.56	1 411	1 903	1.35
1953-54	3 819	6 738	1.76	8 141	8 381	1.03	3 921	7 116	1.81	2 159	3 096	1.43
1954-55	2 936	4 541	1.55	9 154	8 212	0.90	2 955	4 286	1.45	2 292	3 093	1.35
1955-56	2 558	4 339	1.70	11 604	9 964	0.86	2 519	3 478	1.38	2 334	3 690	1.58
1956-57	2 865	5 341	1.86	6 701	4 594	0.69	1 578	2 393	1.52	3 349	5 088	1.52
1957-58	3 393	6 140	1.81	8 381	8 762	1.05	2 381	4 148	1.74	2 923	3 854	1.32
1958-59	3 777	6 696	1.77	8 984	8 921	0.99	2 605	4 423	1.70	1 002	1 302	1.30
1959-60	5 016	9 511	1.90	8 910	9 305	1.04	3 344	4 912	1.47	1 285	2 148	1.67
1960-61	6 204	7 821	1.26	9 449	7 114	0.75	2 797	4 003	1.43	1 332	1 198	0.90
1961-62	7 579	13 794	1.82	10 908	10 676	0.98	6 300	9 327	1.48	1 566	2 814	1.80
1962-63	7 993	14 340	1.79	12 587	15 046	1.20	6 208	11 322	1.82	2 299	3 409	1.48
1963-64	5 581	9 414	1.69	12 280	15 339	1.25	7 107	13 047	1.84	2 087	2 693	1.29
1964-65	6 264	12 031	1.92	11 366	9 463	0.83	6 801	9 842	1.45	1 603	2 752	1.72
1965-66	8 056	15 541	1.93	11 449	12 304	1.07	5 709	9 955	1.74	2 223	2 779	1.25
1966-67	8 521	17 540	2.06	14 532	17 236	1.19	5 159	10 412	2.02	1 769	3 039	1.72
1967-68	9 733	20 096	2.06	14 314	18 430	1.29	4 864	8 548	1.76	1 725	2 540	1.47
1968-69	10 608	20 092	1.89	12 721	10 598	0.83	7 039	11 088	1.58	1 358	2 160	1.59
1969-70	12 016	24 896	2.07	8 971	8 272	0.92	5 962	9 531	1.60	1 577	3 224	2.04
1970-71	12 884	29 825	2.31	9 444	8 839	0.94	4 479	7 638	1.71	2 023	4 608	2.28
1971-72	12 576	27 753	2.21	6 432	7 065	1.10	4 570	8 299	1.82	1 025	1 650	1.61
1972-73	12 802	18 711	1.46	6 477	7 144	1.10	4 251	7 701	1.81	504	387	0.77
1973-74	11 121	23 790	2.13	9 173	8 247	0.89	2 521	3 510	1.39	587	1 027	1.74
1974-75	12 020	27 266	2.27	6 069	5 496	0.90	1 535	2 282	1.48	969	2 171	2.24
1975-76	11 475	18 389	1.60	3 924	3 497	0.89	1 644	1 728	1.05	209	261	1.25
1976-77	11 644	24 571	2.11	6 387	8 801	1.38	1 980	3 929	1.98	81	139	1.72
1977-78	11 444	19 403	1.70	4 616	4 279	0.93	1 257	1 545	1.23	326	417	1.28
1978-79	11 938	26 971	2.26	8 564	11 826	1.38	1 366	2 867	2.10	466	928	1.99
1979-80	10 558	17 304	1.60	7 489	7 937	1.10	1 972	3 727	1.90	548	684	1.20
1980-81	10 056	18 307	1.82	8 781	11 146	1.26	1 614	2 545	1.57	413	587	1.42
1981-82	12 108	23 267	1.92	9 923	13 381	1.35	1 293	2 342	1.81	459	740	1.61

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# STATISTICAL SUMMARY

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(Chapter 12)

## Area and Production of Principal Crops, Tasmania—continued

Year	Potatoes			Hops			Pasture Hay			Apples		
	Area	Total production	Yield per hectare	Bearing area	Total production	Yield per hectare	Area	Total production	Yield per hectare	Bearing area (a)	Total production	Yield per hectare
	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes
1860-61	3 084	34 128	11.07	n.a.	n.a.	n.a.	12 880	63 318	4.92	n.a.	2 267	n.a.
1870-71	3 975	36 606	9.21	260	339	1.30	13 602	41 417	3.04		2 819	
1880-81	4 217	33 070	7.84	230	292	1.27	12 794	36 459	2.85		2 953	
1890-91	8 147	74 332	9.12	151	196	1.30	18 365	52 856	2.88		7 030	
1900-01	9 335	95 368	10.22	253	316	1.25	24 868	95 710	3.85		10 497	
1910-11	10 615	71 215	6.71	420	805	1.92	29 539	117 039	3.96		25 681	
1911-12	8 829	63 162	7.15	416	480	1.15	31 349	109 412	3.49		28 691	
1920-21	12 950	90 102	6.96	516	845	1.64	45 980	179 636	3.91	10 364	44 941	4.34
1921-22	14 890	109 351	7.34	572	995	1.74	37 006	139 190	3.76	10 829	56 982	5.26
1922-23	13 924	102 825	7.38	599	986	1.65	40 504	169 967	4.20	10 372	59 592	5.75
1923-24	14 989	101 540	6.77	604	1 040	1.72	39 329	146 614	3.73	10 393	36 006	3.46
1924-25	14 638	84 715	5.88	605	1 009	1.67	35 590	123 054	3.46	10 383	42 103	4.05
1925-26	13 431	68 422	5.09	483	791	1.64	37 472	116 764	3.12	10 311	78 719	7.63
1926-27	13 753	115 931	8.43	528	974	1.84	39 776	153 627	3.86	10 120	55 248	5.46
1927-28	17 951	141 065	7.86	514	1 119	2.18	34 710	126 929	3.66	10 237	89 025	8.70
1928-29	15 094	76 429	5.06	480	875	1.82	32 452	121 344	3.74	10 219	47 628	4.66
1929-30	13 647	92 600	6.79	472	872	1.85	32 437	121 723	3.75	9 562	75 221	7.87
1930-31	15 066	96 818	6.43	393	760	1.93	33 697	131 027	3.89	9 672	72 394	7.48
1931-32	14 727	96 920	6.58	345	725	2.10	34 118	94 081	2.76	9 377	111 334	11.87
1932-33	14 475	99 809	6.90	321	628	1.96	37 501	143 403	4.20	9 402	84 015	8.94
1933-34	14 778	82 578	5.59	328	730	2.22	31 414	111 153	3.54	9 436	94 360	10.00
1934-35	14 714	71 142	4.83	334	831	2.49	38 857	152 492	3.92	9 485	74 947	7.90
1935-36	14 050	87 183	6.21	352	981	2.79	30 247	98 443	2.53	9 296	75 251	8.09
1936-37	14 960	140 781	9.41	365	950	2.60	36 177	139 068	3.84	8 745	87 844	10.05
1937-38	13 139	101 574	7.73	357	958	2.68	29 561	114 809	3.88	8 881	91 292	10.28
1938-39	10 803	90 764	8.40	373	1 041	2.79	32 358	111 291	3.44	8 684	109 048	12.56
1939-40	12 323	116 245	9.43	368	808	2.20	38 957	143 674	3.69	8 850	98 075	11.08
1940-41	15 121	115 871	7.66	369	1 351	3.66	30 789	96 708	3.14	8 808	113 277	12.86
1941-42	12 400	111 613	9.00	427	1 280	3.00	37 488	149 997	4.00	8 970	121 107	13.50
1942-43	16 359	138 112	8.44	448	1 183	2.64	33 209	111 721	3.36	8 889	109 410	12.31
1943-44	24 484	221 296	9.04	435	1 267	2.91	40 178	156 303	3.89	8 896	152 846	17.18
1944-45	32 817	350 773	4.55	441	1 102	2.50	38 855	148 253	3.82	8 723	125 165	14.35
1945-46	22 762	239 930	10.54	445	904	2.03	40 371	118 958	2.95	8 702	162 353	18.66
1946-47	17 493	173 359	9.91	490	1 005	2.05	42 093	172 103	4.09	8 544	80 548	9.43
1947-48	16 342	145 037	8.88	506	1 113	2.20	34 137	139 857	4.10	8 239	150 389	18.25
1948-49	13 079	133 915	10.24	508	694	1.37	36 656	153 118	4.18	7 826	48 828	6.24
1949-50	13 804	123 958	8.98	518	977	1.89	36 962	158 151	4.28	7 661	91 330	11.92
1950-51	12 780	125 990	9.86	518	1 125	2.17	39 007	163 301	4.19	7 378	92 359	12.52
1951-52	12 753	153 424	12.03	531	778	1.47	39 563	175 051	4.42	7 273	93 921	12.91
1952-53	14 304	116 338	8.13	524	1 367	2.61	44 534	195 289	4.39	7 200	71 575	9.94
1953-54	13 971	146 616	10.49	518	973	1.88	49 877	245 459	4.92	7 184	101 047	14.07
1954-55	10 606	102 621	9.68	539	1 353	2.51	39 051	160 495	4.11	6 890	95 426	13.85
1955-56	8 434	79 181	9.39	531	1 437	2.71	55 505	265 619	4.79	6 950	112 896	16.24
1956-57	7 740	91 140	11.78	569	974	1.71	49 837	242 209	4.86	6 754	64 792	9.59
1957-58	8 780	103 129	11.75	571	1 302	2.28	44 581	208 062	4.67	6 804	126 403	18.58
1958-59	6 550	87 279	13.32	579	1 535	2.65	62 250	306 923	4.93	6 651	94 931	14.27
1959-60	6 283	99 573	15.85	581	1 270	2.19	51 211	224 778	4.39	6 509	104 266	16.02
1960-61	4 401	39 677	9.02	569	1 279	2.25	69 206	331 206	4.79	6 404	106 571	16.64
1961-62	4 504	72 709	16.14	571	1 287	2.25	63 632	289 971	4.56	6 239	149 436	23.95
1962-63	5 600	83 870	14.98	588	1 298	2.21	66 952	318 028	4.75	6 268	119 297	19.03
1963-64	4 373	66 470	15.20	592	717	1.21	60 557	253 175	4.18	6 291	162 791	25.88
1964-65	3 801	57 978	15.25	597	947	1.59	72 947	370 204	5.07	6 286	118 250	18.81
1965-66	4 853	77 626	16.00	603	1 392	2.31	59 824	261 366	4.37	6 254	159 343	25.48
1966-67	4 159	74 476	17.91	594	948	1.60	82 225	443 919	5.40	6 165	120 040	19.47
1967-68	4 435	80 327	18.11	608	1 363	2.24	72 373	314 060	4.34	6 048	151 322	25.02
1968-69	4 638	73 278	15.80	616	1 582	2.57	85 212	502 159	5.89	5 863	135 986	23.19
1969-70	3 790	67 995	17.94	565	1 268	2.24	69 526	367 340	5.28	5 804	140 977	24.29
1970-71	3 640	72 591	19.94	452	1 077	2.38	85 656	447 766	5.23	5 715	140 463	24.58
1971-72	3 593	70 370	19.59	539	1 159	2.15	81 176	449 936	5.54	5 218	111 887	21.44
1972-73	3 330	78 286	23.51	616	1 450	2.35	53 937	215 580	4.00	4 980	133 449	26.80
1973-74	3 127	62 866	20.10	703	1 949	2.77	88 884	448 355	5.04	4 148	113 012	27.24
1974-75	4 143	95 610	23.07	662	1 439	2.17	78 557	375 969	4.79	3 335	95 247	28.56
1975-76	3 354	95 614	28.51	513	1 129	2.20	70 262	322 235	4.59	2 947	72 529	24.61
1976-77	3 705	112 269	30.30	587	1 330	2.27	69 730	334 961	4.80	2 741	71 781	26.19
1977-78	3 592	107 240	29.86	567	1 201	2.12	46 480	166 495	3.58	2 601	63 444	24.39
1978-79	3 646	124 385	34.12	578	1 457	2.52	65 835	295 464	4.49	2 693	85 230	31.65
1979-80	4 115	136 197	33.10	620	1 183	1.90	57 689	243 527	4.20	2 661	74 434	28.00
1980-81	4 335	155 965	35.97	672	1 558	2.32	61 555	241 817	3.93	2 758(a)	76 033	27.57
1981-82	4 438	160 797	36.2	811	1 608	1.98	60 939	233 471	3.83	2 668	67 376	25.25

(a) From 1980-81: total area.

(Chapter 12)

## Livestock Numbers: Production of Wool; Lambing, Tasmania

Year	Livestock (a)				Production of Wool (a)			Lambing	
	Horses	Cattle	Sheep	Pigs	Number of sheep and lambs shorn	Average yield per sheep and lamb shorn (including crutchings)	Production of wool (including dead, fell-mongered & exported on skins)	Ewes mated	Lambs marked
	'000	'000	'000	'000		kg	'000 kg	'000	'000
1860	21	83	1 701	31	n.a.	n.a.	2 058	n.a.	n.a.
1870	23	101	1 350	49			1 881		
1880	25	127	1 794	48			4 094		
1890	31	162	1 619	82			4 075		
1900	32	166	1 684	68			3 064		
1910	41	202	1 788	64			6 050		
1920-21	39	208	1 571	38	1 551	2.94	5 218	416	299
1921-22	38	217	1 551	50	1 428	3.25	5 278	506	378
1922-23	37	218	1 558	46	1 503	3.26	5 542	524	411
1923-24	38	220	1 558	47	1 507	3.13	5 312	517	392
1924-25	37	226	1 614	47	1 630	3.16	5 662	557	423
1925-26	38	212	1 619	41	1 639	3.18	5 699	554	390
1926-27	37	213	1 808	39	1 738	2.93	5 594	563	433
1927-28	36	211	1 905	42	1 859	2.99	6 021	629	488
1928-29	35	209	2 001	48	1 902	3.22	6 759	640	502
1929-30	34	215	2 091	53	1 983	3.14	6 804	679	534
1930-31	33	230	2 120	55	1 961	3.11	6 713	695	547
1931-32	31	232	2 012	41	1 913	3.14	6 668	647	478
1932-33	30	251	2 041	41	1 940	3.16	6 895	679	526
1933-34	30	262	2 035	38	1 991	2.91	6 441	686	517
1934-35	31	262	2 038	40	1 976	2.90	6 366	672	497
1935-36	31	270	2 140	45	2 010	3.37	7 394	735	586
1936-37	31	262	2 234	40	1 106	2.72	6 381	791	594
1937-38	32	255	2 521	43	2 460	2.60	7 076	873	722
1938-39	30	262	2 626	45	2 432	3.03	7 946	940	737
1939-40	30	252	2 677	45	2 509	3.08	8 316	940	756
1940-41	29	259	2 682	47	2 517	2.78	7 746	988	764
1941-42	29	253	2 398	45	2 416	3.04	7 704	844	669
1942-43	27	245	2 227	49	2 293	2.98	7 827	785	655
1943-44	26	230	2 188	46	2 260	2.93	8 130	811	669
1944-45	26	225	2 156	47	2 235	2.79	7 404	756	629
1945-46	25	216	1 926	47	2 015	2.73	7 411	701	509
1946-47	24	220	1 933	47	2 005	3.04	7 549	577	440
1947-48	23	244	2 087	45	2 085	3.18	6 952	779	656
1948-49	22	266	2 160	37	2 198	3.09	7 641	803	662
1949-50	21	275	2 170	36	2 255	2.97	7 692	800	652
1950-51	20	272	2 182	45	2 245	2.99	7 824	774	637
1951-52	19	226	2 338	47	2 379	3.42	9 305	839	726
1952-53	18	275	2 422	39	2 502	3.19	8 984	894	768
1953-54	17	295	2 465	46	2 553	3.16	9 124	916	788
1954-55	16	319	2 595	58	2 715	3.53	10 794	968	884
1955-56	15	332	2 673	49	2 733	3.45	10 624	979	877
1956-57	14	354	2 943	52	3 082	3.78	13 009	1 150	1 056
1957-58	13	371	3 298	63	3 388	3.50	13 234	1 266	1 199
1958-59	12	374	3 536	69	3 673	3.57	14 803	1 381	1 269
1959-60	11	375	3 494	67	3 834	3.44	15 241	1 461	1 354
1960-61	9	394	3 439	71	3 678	3.44	14 456	1 378	1 267
1961-62	9	425	3 532	76	3 830	3.56	15 635	1 440	1 368
1962-63	8	444	3 570	70	3 783	3.64	15 677	1 419	1 310
1963-64	8	450	3 600	83	3 868	3.47	15 425	1 458	1 353
1964-65	7	451	3 792	92	3 978	4.06	17 994	1 478	1 374
1965-66	n.a.	492	4 127	96	4 318	3.88	18 986	1 651	1 594
1966-67	7	522	4 321	86	4 517	3.88	19 574	1 688	1 574
1967-68	n.a.	564	4 428	87	4 572	3.34	17 376	1 779	1 522
1968-69		586	4 395	95	4 632	4.09	21 299	1 736	1 561
1969-70		646	4 560	111	4 792	4.05	21 861	1 831	1 715
1970-71	n.a.	733	4 517	113	4 806	3.99	21 671	1 889	1 705
1971-72		829	4 237	104	4 607	4.03	21 063	1 805	1 617
1972-73		900	3 824	85	4 251	3.76	18 154	1 604	1 369
1973-74		884	3 964	68	4 101	3.90	17 549	1 535	1 361
1974-75		921	4 136	64	4 153	4.12	18 888	1 644	1 466
1975-76		909	4 249	70	4 352	4.13	19 951	1 677	1 515
1976-77		819	4 015	65	4 229	3.82	18 109	1 640	1 378
1977-78		733	3 969	64	4 242	4.00	18 294	1 672	1 529
1978-79		657	4 157	61	4 319	4.04	19 079	1 712	1 582
1979-80		649	4 245	63	4 350	4.00	20 003	1 861	1 706
1980-81		659	4 381	54	4 627	3.91	20 049	1 892	1 674
1981-82		628	4 513	47	4 841	4.10	21 783	2 010	1 843

(a) Up to 1925-26 numbers recorded were at varying dates in the years shown; from 1926 to 1940 at 31 December; from 1941-42 at 31 March.

(Chapter 12)

## Livestock Slaughtered (a) for Human Consumption, Tasmania

Year	Cattle and Calves				Sheep and Lambs			Pigs
	Bulls, bullocks & steers	Cows and heifers	Calves	Total	Sheep	Lambs	Total	
1924-25	21 068	12 544	2 542	36 154	212 983	63 134	276 117	55 229
1929-30	20 430	13 034	1 814	35 278	228 090	113 437	341 527	64 287
1939-40	32 685	12 110	3 633	48 428	248 372	212 585	460 957	73 398
1944-45	27 290	14 356	4 701	46 527	323 797	185 616	509 413	58 068
1949-50	29 331	23 736	4 580	57 647	245 691	262 360	508 051	50 861
1950-51	32 199	28 921	8 637	69 757	234 084	250 535	484 619	57 787
1951-52	33 352	29 506	8 729	71 587	226 377	256 116	482 493	65 893
1952-53	32 913	25 270	12 297	70 480	269 776	306 739	576 515	65 520
1953-54	22 630	25 188	13 955	61 773	286 665	307 326	593 991	59 473
1954-55	26 741	32 871	15 333	74 945	287 103	356 103	643 206	79 305
1955-56	32 259	36 370	19 786	88 415	256 188	388 802	644 990	87 609
1956-57	38 494	38 341	25 195	102 030	280 082	403 859	683 941	82 032
1957-58	42 028	45 294	30 534	117 856	283 242	451 214	734 456	90 593
1958-59	42 525	49 046	35 923	127 494	362 988	546 196	909 184	107 489
1959-60	47 147	56 885	40 548	144 580	504 961	661 470	1 166 431	114 538
1960-61	35 515	43 309	36 170	114 994	474 690	601 042	1 075 732	111 457
1961-62	42 614	48 638	44 230	135 482	510 626	649 306	1 159 932	120 450
1962-63	49 510	62 317	46 149	157 976	465 996	628 757	1 094 753	115 424
1963-64	51 518	70 885	53 823	176 226	544 945	582 113	1 127 058	123 502
1964-65	52 946	70 510	50 610	174 066	424 810	562 135	986 945	134 526
1965-66	47 066	60 664	46 514	154 244	566 671	597 197	1 163 868	146 266
1966-67	52 475	67 206	50 789	170 470	552 235	606 859	1 159 094	148 913
1967-68	57 871	66 016	47 872	171 759	600 124	524 850	1 124 974	142 986
1968-69	68 376	64 160	45 236	177 772	567 501	673 446	1 240 947	138 954
1969-70	78 618	66 473	32 765	177 856	608 311	688 664	1 296 975	160 112
1970-71	78 926	61 139	22 011	162 076	713 204	680 679	1 393 883	170 579
1971-72	96 255	69 186	19 346	184 787	812 960	662 193	1 475 153	165 007
1972-73	124 672	110 177	25 933	260 782	636 501	641 718	1 278 219	152 004
1973-74	126 251	103 552	29 554	259 357	335 566	489 697	825 263	115 625
1974-75	149 285	75 382	37 450	262 117	402 813	577 119	979 932	101 359
1975-76	164 059	119 418	64 536	348 013	454 912	613 611	1 068 532	94 090
1976-77	144 910	139 910	72 888	357 708	469 125	523 522	992 647	99 603
1977-78	160 977	132 802	68 686	362 465	386 772	650 067	1 036 839	92 474
1978-79	123 590	103 152	54 466	281 209	345 388	502 890	848 278	90 520
1979-80	95 600	83 000	39 500	218 100	316 900	613 200	930 100	88 700
1980-81 r	95 856	86 084	42 170	224 110	403 273	646 903	1 050 176	88 564
1981-82	106 569	91 491	53 830	251 890	451 978	690 711	1 142 689	77 163
1982-83	109 417	106 467	59 604	275 548	563 288	764 383	1 327 671	77 251

(a) Including livestock slaughtered on farms.

(Chapter 12)

## Value of Agricultural Commodities Produced, Tasmania (\$'000)

Year	Crops (a)		Livestock slaughtering and other disposals		Livestock products		Total agriculture	
	Gross	Local	Gross	Local	Gross	Local	Gross	Local
1970-71	40 169	29 174	28 142	25 910	41 903	40 194	110 214	95 277
1971-72	33 748	24 043	31 468	28 956	46 980	45 133	112 196	98 132
1972-73	40 041	28 261	43 562	40 363	64 750	61 652	148 353	130 276
1973-74	46 649	36 969	58 019	54 000	59 995	57 262	164 663	148 231
1974-75	49 409	39 670	31 707	29 083	56 520	53 124	137 636	121 876
1975-76	r 43 009	r 35 230	34 052	31 042	60 672	56 991	r 137 733	r 123 263
1976-77	r 55 706	r 48 703	46 103	42 199	72 075	68 176	r 173 884	r 159 078
1977-78	r 53 961	r 47 841	54 776	47 855	76 108	72 155	r 184 845	r 167 857
1978-79	76 936	68 760	91 737	80 197	r 86 744	r 82 657	r 255 417	r 231 614
1979-80	r 70 397	r 61 656	100 332	87 372	r 93 674	r 89 001	r 264 403	r 238 029
1980-81	80 324	71 098	94 080	82 395	100 219	95 104	274 623	248 597
1981-82	92 265	81 427	90 162	78 754	117 746	112 730	300 173	272 911

(a) Excludes crops and pasture harvested for green feed or silage.

(Chapter 12)

**Production of Meat, Tasmania**  
(Tonnes: Carcass Weight)

Year	Beef and Veal			Mutton and lamb			Pigmeat (a)	Total
	Beef	Veal	Total	Mutton	Lamb	Total		
1924-25	8 233		8 233	4 154	888	5 042	2 561	15 836
1929-30	8 153		8 153	4 448	1 595	6 043	2 848	17 044
1939-40	10 626	165	10 791	4 845	2 989	7 834	3 560	22 185
1944-45	9 117	212	9 329	6 400	2 948	9 348	3 104	21 781
1949-50	12 299	169	12 468	4 896	4 173	9 069	2 597	24 134
1955-56	15 133	530	15 663	5 260	6 707	11 967	3 693	31 323
1956-57	17 592	612	18 204	5 812	6 998	12 810	3 402	34 416
1957-58	19 635	726	20 361	5 694	7 739	13 433	4 284	38 078
1958-59	19 893	839	20 732	7 444	9 223	16 667	4 990	42 389
1959-60	22 610	906	23 516	10 267	10 846	21 113	5 438	50 067
1960-61	16 388	777	17 165	9 513	9 715	19 228	5 138	41 531
1961-62	19 076	910	19 989	10 228	10 326	20 554	5 515	46 058
1962-63	23 076	999	24 075	9 614	10 083	19 697	5 549	49 321
1963-64	24 988	1 337	26 325	11 101	9 300	20 401	6 022	52 748
1964-65	25 741	951	26 692	9 225	9 189	18 414	6 691	51 797
1965-66	22 429	951	23 380	11 697	9 739	21 436	7 136	51 952
1966-67	24 124	967	25 091	11 412	9 825	21 237	7 279	53 607
1967-68	24 509	977	25 486	11 666	8 497	20 163	7 001	52 650
1968-69	27 583	802	28 385	11 701	11 112	22 813	7 137	58 335
1969-70	30 909	599	31 509	12 767	11 282	24 049	8 007	63 564
1970-71	29 481	398	29 879	14 755	11 318	26 073	8 530	64 482
1971-72	34 422	374	34 796	16 314	10 875	27 189	8 266	70 251
1972-73	46 946	525	47 471	12 201	10 327	22 528	7 389	77 388
1973-74	45 669	613	46 282	6 672	8 096	14 768	5 477	66 527
1974-75	47 592	721	48 313	7 984	9 508	17 492	4 872	70 677
1975-76	57 924	1 242	59 166	8 997	9 849	18 846	4 516	82 529
1976-77	55 790	1 613	57 403	8 494	8 189	16 683	4 946	79 032
1977-78	59 779	1 556	61 335	7 035	9 849	16 884	4 785	83 004
1978-79	46 269	1 152	47 421	6 833	7 883	14 716	4 834	66 971
1979-80	36 561	835	37 396	5 656	9 017	14 673	4 862	56 931
1980-81	36 812	924	37 736	7 420	9 976	17 396	4 767	59 899
1981-82	40 561	1 266	41 827	8 492	10 647	19 139	4 262	65 228
1982-83	43 518	1 376	44 894	10 364	11 840	22 204	4 196	71 294

(a) Includes pork for manufacture into bacon and ham.

(Chapter 12)

**Weighted Average Prices Paid To Farmers Per Unit of Selected Farm Products, Tasmania**  
(\$ per tonne)

Year	Cereal for grain		Hops	Orchard fruit		Small fruit		Vegetables		Wool greasy
	Wheat	Barley		Apples	Pears	Currants	Rasp-berries	Potatoes	Peas	
1929-30	18	15	198	17	23	40	40	13	n.a.	220
1934-35	12	13	309	28	28	40	40	17	n.a.	200
1939-40	12	17	331	23	25	70	70	18	n.a.	260
1944-45	18	23	397	20	20	90	70	25	n.a.	350
1949-50	50	32	772	64	73	130	130	30	n.a.	1 320
1954-55	50	74	1 213	101	114	180	180	79	30	1 410
1959-60	51	59	1 389	99	100	220	200	39	28	1 150
1960-61	51	63	1 367	102	126	260	180	89	31	1 060
1961-62	59	64	1 433	104	87	260	220	52	26	1 080
1962-63	54	61	1 433	112	122	240	220	25	60	1 210
1963-64	53	63	1 433	107	111	260	220	64	115	1 480
1964-65	49	61	1 499	113	129	220	220	116	103	1 080
1965-66	51	58	1 565	100	68	200	220	37	96	1 230
1966-67	53	63	1 653	124	119	240	240	54	108	1 120
1967-68	(g) 54	66	1 698	110	102	290	310	48	117	960
1968-69	42	57	1 698	107	124	290	330	29	111	1 050
1969-70	53	52	1 698	110	136	310	330	46	99	880
1970-71	48	51	1 698	103	134	330	350	42	119	740
1971-72	54	47	1 874	103	117	330	350	37	115	1 900
1972-73	52	52	1 961	121	174	350	350	57	106	2 290
1973-74	104	77	1 649	121	117	390	410	87	116	1 920
1974-75	104	92	1 860	149	181	470	530	59	131	1 370
1975-76	97	99	1 395	173	171	500	500	77	147	1 570
1976-77	82	111	1 695	165	195	550	580	83	156	2 100
1977-78	86	121	1 957	202	261	700	740	83	158	2 090
1978-79	109	122	2 202	195	248	720	870	102	158	2 340
1979-80	128	124	2 553	223	284	780	950	104	159	2 700
1980-81	139	150	3 002	220	352	800	1 080	110	177	2 770
1981-82	136	162	3 183	281	331	666	1 173	116	223	2 820

# STATISTICAL SUMMARY

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(Chapter 13)

Assayed Contents of Metallic Minerals Produced: Coal Production, Tasmania

Year	Cadmium	Copper	Gold	Iron	Lead	Manganese
	tonnes	tonnes	kg	tonnes	tonnes	tonnes
1953 .....	73	9 045	528	—	10 199	—
1955 .....	50	8 529	525	—	11 448	—
1960 .....	57	11 867	747	—	13 249	175
1961 .....	63	12 947	836	—	12 450	188
1962 .....	73	14 748	999	—	14 991	268
1963 .....	75	17 075	1 133	—	15 222	262
1964 .....	78	15 118	1 069	—	15 594	247
1965 .....	71	15 411	1 023	—	14 466	237
1966 .....	76	17 278	1 135	—	15 828	258
1967 .....	74	17 540	1 167	—	15 375	247
1968 .....	75	16 867	1 135	502 462	15 152	250
1969 .....	77	18 983	1 252	1 388 328	15 145	258
1970 .....	70	23 934	1 335	1 346 065	13 934	209
1971 .....	84	25 525	1 793	1 497 486	16 617	509
1972 .....	138	28 298	2 021	1 623 450	26 806	2 205
1973 .....	178	25 821	1 511	1 678 146	20 236	2 399
1974 .....	126	29 086	1 586	1 514 373	19 017	385
1975 .....	167	26 460	1 668	1 431 041	19 552	265
1976 .....	157	25 342	1 495	1 542 306	18 034	232
1977 .....	199	22 002	1 891	1 413 476	22 800	427
1978 .....	188	23 908	1 912	1 446 024	22 754	341
1979 .....	188	22 591	1 747	1 528 225	22 160	269
1980 .....	119	23 013	1 311	1 472 923	15 511	198
1981 .....	181	22 402	1 950	1 543 938	25 517	249
Year	Silver	Sulphur	Tin	Tungstic oxide (WO <sub>3</sub> )	Zinc	Coal production
	kg	tonnes	tonnes	tonnes	tonnes	tonnes
1953 .....	38 599	42 516	801	1 069	30 247	237 370
1955 .....	36 267	38 857	867	1 358	28 396	304 023
1960 .....	43 483	55 636	898	1 115	35 069	302 448
1961 .....	45 162	53 128	893	1 543	40 735	259 934
1962 .....	52 876	37 145	1 075	1 052	48 687	276 713
1963 .....	52 969	42 997	1 021	975	49 267	210 243
1964 .....	55 364	57 004	1 006	1 009	50 960	153 587
1965 .....	52 192	54 840	1 043	1 196	47 053	104 101
1966 .....	57 013	63 804	1 047	1 327	50 651	83 990
1967 .....	55 955	62 470	1 553	1 202	49 641	77 769
1968 .....	54 400	53 926	3 154	1 425	48 919	92 389
1969 .....	54 213	47 449	4 853	1 524	50 898	117 794
1970 .....	53 343	84 502	5 018	1 434	46 922	113 529
1971 .....	63 389	109 046	6 166	1 742	52 749	123 922
1972 .....	99 251	164 884	6 825	1 918	85 580	132 242
1973 .....	76 903	160 971	5 674	1 502	63 792	114 588
1974 .....	80 180	153 767	5 950	1 304	65 311	127 460
1975 .....	76 401	152 884	5 489	1 712	67 476	161 922
1976 .....	71 310	154 008	6 853	2 202	62 004	189 489
1977 .....	84 772	163 486	6 634	2 534	78 405	198 966
1978 .....	86 193	148 966	7 270	2 630	77 388	223 957
1979 .....	76 662	84 422	6 892	2 522	75 279	237 380
1980 .....	57 159	41 227	6 234	2 914	54 273	234 175
1981 .....	78 177	53 683	7 057	2 983	74 413	345 951
1982 .....	84 697	59 575	8 009	1 915	79 493	514 986

(Chapter 13)

Fisheries, Tasmania

Year	Boats engaged (a)	Persons engaged (a)	Production (b)						Gross value of production (c)	
			Fish				Southern rock lobster	Scallops		Abalone
			Snoek (barracouta)	Salmon	Shark	Other				
	no.	no.	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	\$'000
1951-52 .....			1 580	50	392	319	852	738	—	882
1952-53 .....			1 819	61	1 010	231	1 222	1 465	—	1 210
1953-54 .....	n.a.	n.a.	362	173	506	238	1 006	1 714	—	864
1954-55 .....			673	195	301	243	1 313	2 452	—	1 112
1955-56 .....			576	116	291	170	1 108	2 625	—	1 012
1956-57 .....	472	958	1 100	33	235	180	954	2 664	—	1 216
1957-58 .....	458	907	414	60	384	128	1 088	1 888	—	1 016
1958-59 .....	438	923	644	93	360	171	1 250	2 148	—	1 328
1959-60 .....	469	968	711	147	413	167	1 329	2 043	—	1 612
1960-61 .....	478	1 072	373	545	439	166	1 436	2 402	—	1 920
1961-62 .....	514	1 122	935	1 325	451	128	1 554	2 164	—	21294
1962-63 .....	511	1 208	512	528	377	155	1 501	2 663	—	2 254
1963-64 .....	507	1 191	639	385	370	160	1 620	1 932	49	2 203
1964-65 .....	503	957	915	227	299	209	1 513	1 323	225	2 686
1965-66 .....	596	1 154	1 362	196	493	212	1 787	394	726	3 300
1966-67 .....	618	1 200	1 037	427	455	270	1 946	341	1 999	3 653
1967-68 .....	585	1 118	1 624	343	685	300	1 752	225	2 786	4 473
1968-69 .....	566	1 160	1 401	174	947	248	1 700	125	2 108	4 864
1969-70 .....	553	1 123	1 578	67	801	219	1 390	50	2 608	4 043
1970-71 .....	529	1 090	610	201	793	335	1 607	—	3 488	5 984
1971-72 .....	588	1 207	581	507	859	433	1 469	52	2 971	6 808
1972-73 .....	589	1 235	915	461	497	392	1 583	515	2 172	5 739
1973-74 .....	594	1 268	598	371	1 187	7 728	1 514	1 158	2 060	7 014
1974-75 .....	616	1 343	760	631	651	828	1 525	1 261	2 108	6 928
1975-76 .....	607	1 347	143	473	1 238	375	1 229	690	2 429	8 511
1976-77 .....	640	1 439	37	573	1 130	413	1 117	498	2 368	11 662
1977-78 .....	655	1 466	194	611	1 710	590	1 192	400	2 525	12 609
1978-79 .....	727	1 620	38	451	1 490	626	1 305	1 077	3 100	14 636
1979-80 .....	760	1 687	7	283	1 210	688	1 340	3 829	1 314	20 463
1980-81 .....	781	1 678	2	200	1 288	1 037	1 553	3 359	3 743	26 514
1981-82 .....	n.a.	n.a.	1	417	1 086	994	1 713	7 577	4 194	32 896
1982-83 .....	n.a.	n.a.	2	211	793	841	1 887	11 573	2 968	31 140

(a) Year ended December of the first year named.

(b) Landed at Tasmanian ports; estimated live weight.

(c) Includes crabs, squid, oysters and seaweed.



(Chapter 14)

## Principal Articles Produced in Factories, Tasmania

Year	Foodstuffs					Refined zinc tonnes
	Butter (a)	Cheese (factory and farm) (b)	Bacon and ham (cured weight) (c)	Flour (incl. wheatmeal for baking)	Aerated waters	
	tonnes	tonnes	tonnes	tonnes	'000 litres	
1939-40 .....	5 380	1 470	1 313	17 137	1 650	74 012
1949-50 .....	5 614	428	1 007	24 714	4 510	85 122
1959-60 .....	12 079	372	1 162	28 007	8 356	119 785
1960-61 .....	10 552	399	1 138	26 388	8 656	127 957
1961-62 .....	12 376	641	1 149	26 356	8 828	131 140
1962-63 .....	13 405	681	1 201	26 442	9 683	138 391
1963-64 .....	13 984	1 358	1 185	24 868	9 938	140 835
1964-65 .....	14 218	2 388	1 190	25 367	10 310	141 006
1965-66 .....	14 229	2 989	1 079	25 022	11 111	146 227
1966-67 .....	14 541	3 822	1 262	24 470	11 583	146 227
1967-68 .....	13 999	4 724	1 302	23 957	12 029	131 872
1968-69 .....	16 017	5 820	1 416	23 826	12 644	151 094
1969-70 .....	16 343	5 407	1 403	21 947	13 354	170 931
1970-71 .....	15 273	5 556	1 803	22 264	14 049	162 271
1971-72 .....	15 318	5 923	1 984	22 488	14 402	175 798
1972-73 .....	12 947	7 218	1 902	31 698	15 236	193 782
1973-74 .....	12 398	8 475	1 931	34 643	15 751	182 749
1974-75 .....	12 196	12 387	2 169	34 938	14 845	152 749
1975-76 .....	10 762	13 332	2 356	30 691	16 219	137 637
1976-77 .....	9 707	13 156	2 434	32 427	18 786	170 685
1977-78 .....	7 910	13 903	2 505	32 780	20 082	161 173
1978-79 .....	7 075	17 494	2 457	34 901	19 834	204 623
1979-80 .....	5 490	r 13 328	2 094	37 269	18 361	191 683
1980-81 .....	4 234	r 14 147	2 375	37 811	19 397	188 471
1981-82 .....	3 964	15 167	2 634	35 068	19 108	193 714
1982-83 .....	5 768	14 100	2 661	n.p.	n.p.	185 482

## Principal Articles Produced in Factories, Tasmania—continued

Year	Chemicals, fertilisers, etc.			Sawn, peeled and sliced timber (d)	Miscellaneous	
	Sulphuric acid	Super- phosphate	Sulphate of ammonia		Newsprint	Electricity (e)
	tonnes	tonnes	tonnes	'000 m <sup>3</sup>	tonnes	m kWh
1939-40 .....	14 552	33 337	—	189.7	—	612
1949-50 .....	42 747	69 943	—	298.2	30 961	1 062
1954-55 .....	70 676	77 034	—	331.3	74 789	1 589
1959-60 .....	129 077	104 260	58 525	400.4	89 931	2 532
1960-61 .....	137 178	106 285	62 574	388.3	89 452	2 632
1961-62 .....	138 636	121 143	62 319	351.6	91 199	2 733
1962-63 .....	142 227	127 426	53 274	377.2	91 693	3 213
1963-64 .....	161 381	134 233	43 506	403.2	93 516	3 409
1964-65 .....	184 936	132 445	60 772	420.2	94 637	3 780
1965-66 .....	198 551	162 441	65 135	421.2	94 707	3 896
1966-67 .....	211 201	166 757	58 422	411.5	98 816	4 116
1967-68 .....	185 303	145 968	13 086	413.5	94 135	3 773
1968-69 .....	206 474	140 340	40 324	414.4	125 924	4 738
1969-70 .....	266 449	133 245	40 563	413.7	173 314	5 140
1970-71 .....	387 193	105 323	40 252	406.1	178 683	5 451
1971-72 .....	558 658	104 763	41 358	412.8	181 477	5 778
1972-73 .....	652 513	177 192	48 654	416.3	199 053	5 902
1973-74 .....	570 156	180 458	33 191	414.3	200 852	6 010
1974-75 .....	517 052	103 253	54 701	410.2	196 240	6 095
1975-76 .....	466 817	57 896	23 040	373.5	206 228	6 008
1976-77 .....	506 338	101 281	12 291	368.1	206 590	6 842
1977-78 .....	522 154	97 012	5 292	338.5	207 621	7 179
1978-79 .....	414 644	151 489	6 045	320.6	208 143	7 748
1979-80 .....	302 550	132 783	1 213	355.2	221 460	7 903
1980-81 .....	253 547	139 869	969	373.9	214 400	8 044
1981-82 .....	335 507	126 416	—	327.2	219 429	8 122
1982-83 .....	292 323	104 324	913	235.9	222 934	7 978

(a) Includes butter equivalent of butter oil and from 1965-66 excludes farm production.

(b) Source: Tasmanian Department of Agriculture up to 1978-79; Australian Dairy Corporation from 1979-80.

(c) Includes non-factory production. From July 1970 all weights are on a bone-in basis; earlier figures include an element of unconverted bone-out weights.

(d) Includes hardwood and softwood.

(e) Mainly output of Hydro-Electric Commission.

(NOTE: Details of production of a number of important articles cannot be published because of confidentiality.)

## (Chapter 14)

## Manufacturing, Tasmania

Year	Number of factories at end of year	Employment (a)			Salaries and wages paid (b) (\$'000)	Value of Materials used (\$'000)	Value of output (c) (\$'000)	Value of production (d) (\$'000)	Land and buildings (\$'000)	Plant and machinery (\$'000)
		Males	Females	Persons						
1910	635	8 277	1 703	9 980	n.a.	n.a.	n.a.	n.a.	2 044	2 092
1915	589	7 161	1 259	8 420	1 567	4 387	8 431	3 823	2 265	2 457
1920	616	8 746	1 479	10 225	2 960	8 469	14 304	5 525	1 963	3 863
1924-25	675	9 016	1 982	10 998	3 776	6 885	15 685	7 251	4 209	13 457
1929-30	845	8 547	2 273	10 820	4 056	8 025	17 121	7 124	5 994	13 894
1934-35	926	8 321	2 234	10 555	3 204	6 260	14 446	6 316	5 390	12 138
1939-40	980	11 754	2 916	14 670	5 372	10 821	25 987	12 506	7 551	13 576
1940-41	1 002	12 341	3 498	15 839	6 119	12 377	27 735	12 584	8 474	15 098
1941-42	994	13 389	4 167	17 556	7 442	14 922	32 622	14 429	8 769	15 226
1942-43	992	13 941	4 369	18 310	8 946	17 393	37 408	16 151	9 854	16 267
1943-44	994	14 697	5 094	19 791	10 387	19 144	41 696	18 091	10 586	16 129
1944-45	1 006	14 756	4 755	19 511	10 017	19 934	42 714	17 805	10 983	15 934
1945-46	1 082	15 105	4 130	19 235	10 013	20 616	44 239	18 391	10 609	16 461
1946-47	1 169	16 186	3 751	19 937	11 276	22 650	49 139	21 335	11 356	17 000
1947-48	1 225	17 208	3 965	21 173	13 731	27 311	57 569	24 489	12 543	19 832
1948-49	1 346	18 508	4 094	22 602	16 913	34 319	73 314	32 149	14 670	24 507
1949-50	1 456	19 302	4 204	23 506	19 293	43 468	90 160	38 671	17 299	27 456
1950-51	1 486	19 454	4 373	23 827	23 475	58 290	117 249	49 229	20 701	34 312
1951-52	1 512	19 934	4 093	24 027	29 407	71 804	143 853	59 588	24 999	41 181
1952-53	1 504	19 621	3 874	23 495	31 953	67 333	142 007	60 997	29 925	45 240
1953-54	1 545	20 249	4 340	24 589	34 763	74 851	155 822	66 129	53 993	54 984
1954-55	1 597	21 045	4 407	25 452	37 727	84 930	177 202	76 228	59 206	59 758
1955-56	1 594	22 128	4 934	27 062	43 196	95 882	207 558	91 862	93 158	80 849
1956-57	1 595	22 482	5 188	27 670	47 273	101 274	220 780	97 365	112 946	89 672
1957-58	1 655	23 081	5 003	28 084	50 641	100 582	227 651	103 660	118 906	93 719
1958-59	1 666	23 504	4 920	28 424	51 656	103 093	236 587	108 602	123 660	96 451
1959-60	1 683	24 408	5 254	29 662	57 573	119 822	268 050	120 392	144 024	107 315
1960-61	1 766	24 811	5 347	30 158	60 659	122 508	275 902	124 892	147 099	112 632
1961-62	1 760	24 742	5 328	30 070	61 440	126 128	283 547	127 874	159 149	121 589
1962-63	1 764	25 453	5 302	30 755	64 837	131 100	303 920	142 033	163 919	138 159
1963-64	1 746	26 221	5 612	31 833	70 582	154 613	341 065	152 571	168 403	141 651
1964-65	1 805	26 768	5 812	32 580	76 515	175 920	381 549	167 251	209 010	155 336
1965-66	1 792	28 041	6 274	34 315	82 963	188 678	404 581	175 606	211 923	158 672
1966-67	1 771	28 364	6 515	34 879	90 756	201 027	437 964	194 571	233 983	169 159
1967-68	1 797	28 550	6 628	35 178	96 236	203 084	445 076	198 019	263 364	184 683

(a) Commencing with 1927-28, the number of persons employed is the average over the whole year; prior to the date the number represents the average over the period of operation.

(b) Excludes amounts drawn by working proprietors.

(c) Value of goods manufactured and work done.

(d) Value of output less recorded costs of manufacture other than labour.

## (Chapter 14)

## Economic Censuses: Manufacturing, Tasmania (a)

Year (b)	Establishments operating at 30 June	Employment (average over whole year) (c)			Wages and Salaries (\$'000)	Turnover (b) (\$'000)	Purchases, transfer in and selected expenses (e) (\$'000)	Value added (f) (\$'000)	Fixed capital expenditure (g) (\$'000)
		Males	Females	Persons					
1968-69	951	24 892	6 182	31 074	95 065	487 109	301 739	197 464	35 080
1969-70	945	25 371	6 389	31 760	102 104	541 636	317 546	226 083	49 443
1971-72	933	24 856	6 151	31 007	119 411	598 612	359 300	245 068	25 944
1972-73	912	24 668	6 016	30 684	130 703	678 763	394 628	283 420	24 893
1973-74	935	25 203	6 324	31 527	161 386	818 049	494 785	340 250	24 798
1974-75(b)	628	23 699	5 153	28 852	194 883	905 656	558 632	402 255	53 146
1975-76	667	22 827	4 926	27 753	211 327	1 029 579	577 393	436 029	43 936
1976-77	617	23 042	4 724	27 766	246 014	1 199 311	694 445	533 288	34 472
1977-78	599	22 022	4 944	26 966	258 341	1 245 979	742 171	497 979	47 243
1978-79	552	21 386	4 680	26 066	266 099	1 401 463	861 690	549 372	77 116
1979-80	543	21 520	4 638	26 158	298 196	1 656 092	1 045 867	653 770	55 933
1980-81	558	21 942	4 586	26 528	346 551	1 867 080	1 175 515	713 445	60 208
1981-82	555	21 345	4 464	25 809	370 167	1 898 046	1 237 455	713 091	84 417

(a) Details are not comparable with those contained in the preceding table.

(b) No census was conducted in 1970-71. From 1974-75 figures exclude details for single establishment enterprises with less than four persons employed.

(c) Includes working proprietors and employees at separately located administrative and ancillary units.

(d) Turnover plus increase (or less decrease) in the value of stocks less purchases, transfers in and selected expenses.

(e) Includes transfers in of goods from other establishments of the enterprise, charges for commission and sub-contract work, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.

(f) Comprises sales of goods, transfers out of goods to establishments of the same enterprise, bounties and subsidies on production, all other operating revenue from outside the enterprise and capital work done for own use, rental or lease.

(g) Outlay on fixed tangible assets less disposals.

(Chapter 15)

## Hydro-Electric Commission, Tasmania

Year	Installed generator capacity (a)	Number of retail consumers	Gross revenue	Working expenses and other charges
	kW	no.	\$'000	\$'000
1929-30 .....	49 000	n.a.	692	636
1934-35 .....	54 250	n.a.	814	754
1939-40 .....	104 500	n.a.	1 212	1 172
1944-45 .....	160 500	55 073	1 776	1 588
1949-50 .....	184 500	75 927	2 938	2 926
1959-60 .....	541 150	117 266	14 570	14 932
1964-65 .....	856 550	131 593	25 009	23 500
1965-66 .....	807 550	134 679	26 293	25 569
1966-67 .....	849 150	135 941	28 299	27 058
1967-68 .....	945 300	139 886	27 627	28 607
1968-69 .....	1 005 600	143 551	33 638	31 824
1969-70 .....	1 031 600	146 958	37 296	35 095
1970-71 .....	1 281 200	149 911	40 151	40 070
1971-72 .....	1 309 200	152 934	46 286	46 278
1972-73 .....	1 352 400	156 570	49 511	49 297
1973-74 .....	1 342 400	160 307	52 730	54 026
1974-75 .....	1 442 400	163 479	62 295	61 870
1975-76 .....	1 462 400	167 507	72 699	72 312
1976-77 .....	1 492 400	171 847	80 372	80 292
1977-78 .....	1 636 400	176 005	95 519	95 269
1978-79 .....	1 780 400	179 861	109 130	108 930
1979-80 .....	1 780 400	183 607	120 505	119 993
1980-81 .....	1 780 400	187 072	139 107	136 712
1981-82 .....	1 860 300	189 727	165 236	159 270

(a) Excludes King and Flinders Islands.

(Chapter 16)

Value of Retail Sales by Commodity Groups, Tasmania  
(\$ Million)

Year	Groceries	Butchers' meat	Other food (a)	Beer, wine, spirits (b)	Clothing, drapery, footwear	Domestic hardware (c)	Electrical goods (d)	Furniture, floor coverings	Other goods (e)	Total (excl. motor vehicles, etc.)
1952-53 (f) .....	17.3	9.1	11.9	10.7	25.7	3.1	4.6	4.9	16.3	103.6
1956-57 (f) .....	23.4	11.1	15.1	14.8	30.4	3.3	6.3	6.4	20.3	131.1
1961-62 (f) .....	28.6	13.9	20.0	17.0	35.3	4.1	10.7	7.2	29.3	166.1
1962-63 .....	29.3	14.9	21.4	16.9	36.0	4.4	11.7	7.8	30.5	172.9
1963-64 .....	31.6	15.5	20.6	18.5	38.4	4.4	11.5	7.9	31.8	180.2
1964-65 .....	33.6	17.1	21.9	18.9	40.6	4.4	11.3	8.5	34.7	191.0
1965-66 .....	35.2	17.8	22.7	20.3	41.6	4.5	11.2	8.7	36.3	198.3
1966-67 .....	36.5	19.4	24.2	23.3	45.5	5.1	11.7	10.1	39.2	215.0
1967-68 .....	37.3	19.9	26.1	25.0	48.9	5.5	12.4	11.2	41.6	227.9
1968-69 (f) .....	48.7	20.7	23.1	30.9	49.5	8.8	13.4	12.6	49.9	257.6
1969-70 .....	41.7	21.0	30.7	28.7	62.2	6.1	13.3	12.9	49.4	256.0
1970-71 .....	45.2	21.3	32.6	30.7	55.6	6.7	13.6	13.5	52.9	272.1
1971-72 .....	50.0	22.2	33.9	32.4	59.7	7.5	15.4	14.4	55.8	291.3
1972-73 .....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	319.5
1973-74 (f) r .....	63.8	26.2	35.8	47.8	76.1	14.4	24.5	21.4	64.5	374.5
1974-75 .....	76.7	31.3	47.2	61.7	100.3	17.1	36.1	28.9	86.1	485.4
1975-76 .....	87.3	31.2	49.7	68.8	101.6	22.1	48.3	31.7	91.6	532.3
1976-77 .....	110.4	35.7	58.0	77.5	117.3	24.5	56.4	34.6	103.6	618.0
1977-78 .....	120.8	37.6	64.0	91.6	133.1	29.0	53.1	37.8	118.4	685.4
1978-79 .....	132.0	48.2	72.8	100.5	141.2	29.5	53.2	38.8	134.3	750.5
1979-80 (f) .....	168.0	55.9	71.9	105.6	151.0	28.2	53.0	39.0	144.3	816.9
1980-81 .....	171.5	55.2	99.0	114.0	154.6	35.5	54.1	39.9	161.9	885.7
1981-82 .....	195.1	60.3	106.8	122.3	166.6	38.8	57.0	42.3	178.9	968.1
1982-83 .....	234.8	63.6	91.4	119.5	186.6	39.5	69.0	41.5	184.4	1 030.5

(a) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc., but excludes some delivered milk and bread.

(b) Excludes sales from licensed clubs up to 1982-83.

(c) Excludes basic building materials (e.g. timber, roofing tiles, etc.), builders' hardware and supplies.

(d) Includes radios, televisions and accessories, musical instruments, domestic refrigerators, etc.

(e) Includes tobacco, cigarettes, newspapers, books, stationery, chemists' goods, jewellery, etc.

(f) Census figures.

(Chapter 16)

## Value of Trade by Sea and Air and Vessels Entered and Cleared Tasmanian Ports

Year	Imports				Exports				Vessels entered Tasmanian ports	
	Overseas		Interstate		Overseas (b)		Interstate (b)		no.	'000 net tons
	By sea and air	By sea (a)	By air	Total (a)	By sea and air	By sea	By air	Total		
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000		
1830	n.a.	n.a.		510	n.a.	n.a.		292	101	27
1840	n.a.	n.a.		1 976	n.a.	n.a.		1 734	492	85
1850	n.a.	n.a.		1 318	n.a.	n.a.		1 288	674	104
1860	1 686	450		2 136	1 544	380		1 924	806	116
1870	698	888		1 586	562	736		1 298	613	106
1880	738	2 000		2 738	1 568	1 456		3 024	654	205
1890	1 594	2 202		3 796	792	2 182		2 974	746	476
1900	1 402	2 746		4 148	3 078	2 144		5 222	741	619
1910	1 662	(d)		n.a.	1 040	(d)		n.a.	979	1 211
1919-20	1 626	(d)		n.a.	4 022	(d)		n.a.	841	632
1929-30	3 668	16 028		19 696	4 978	13 198		18 176	1 076	1 390
1930-31	1 582	12 878		14 460	4 214	9 754		13 968	992	1 319
1931-32	1 130	11 938		13 068	4 106	9 980		14 086	980	1 307
1932-33	1 128	12 464		13 592	3 582	9 790		13 372	1 030	1 461
1933-34	1 274	13 582	n.a.	14 856	4 766	10 254	n.a.	15 020	1 066	1 547
1934-35	1 476	14 452		15 928	4 318	11 844		16 162	1 128	1 610
1935-36	2 498	17 134		19 632	5 502	13 116		18 618	1 191	1 977
1936-37	2 586	18 858		21 444	6 822	14 376		21 198	1 317	2 093
1937-38	3 858	19 854		23 712	5 774	16 500		22 274	1 377	2 202
1938-39	2 838	20 166		23 004	6 796	17 670		24 466	1 384	2 231
1939-40	3 188	21 780		24 968	4 852	20 954		25 806	1 243	1 512
1940-41	2 364	21 876		24 240	3 120	24 052		27 172	1 147	1 264
1941-42	1 918	24 276		26 194	3 746	28 566		32 312	1 031	1 030
1942-43	2 300	26 236		28 536	1 770	30 680		32 450	873	760
1943-44	2 384	26 162		28 546	2 298	35 288		37 586	804	796
1944-45	1 664	27 796		29 460	5 062	36 708		41 770	760	732
1945-46	2 614	29 400		32 014	7 224	33 040		40 264	728	833
1946-47	3 626	37 810		41 436	10 162	32 932		43 094	751	957
1947-48	8 564	44 000		52 564	18 566	35 066		53 632	787	1 106
1948-49	12 512	46 674		59 186	24 890	37 064		62 044	805	1 125
1949-50	18 704	51 218	(e) 10 670	80 592	29 936	42 672	(e) 3 996	76 604	862	1 183
1950-51	25 058	60 636	18 326	104 020	48 514	53 740	6 392	108 646	905	1 279
1951-52	41 422	76 024	20 474	137 920	37 024	71 684	6 018	114 726	902	1 323
1952-53	26 632	76 658	19 936	123 226	43 696	72 804	11 568	128 068	1 012	1 480
1953-54	26 098	87 438	22 164	135 700	35 466	81 488	13 580	130 534	1 060	1 508
1954-55	30 258	89 958	19 148	139 364	37 524	85 376	14 494	137 394	1 081	1 620
1955-56	24 884	99 608	21 166	145 658	40 608	100 630	18 762	160 000	1 030	1 586
1956-57	27 764	105 788	20 020	153 572	45 004	108 654	18 112	171 770	1 161	1 737
1957-58	25 466	113 636	19 122	158 224	44 506	109 652	18 354	172 512	1 241	1 872
1958-59	26 374	121 138	19 718	167 230	43 932	114 424	17 584	175 940	1 257	1 966
1959-60	27 606	130 014	19 210	176 830	47 730	137 530	20 818	206 078	1 308	2 287
1960-61	37 208	141 086	19 356	197 650	42 588	143 036	21 944	207 568	1 354	2 546
1961-62	26 788	141 776	18 000	186 564	57 196	140 794	23 298	221 288	1 533	3 042
1962-63	35 746	150 620	18 158	204 524	66 792	146 454	21 602	234 848	1 614	3 474
1963-64	35 032	167 964	19 840	222 836	73 318	173 590	23 424	275 332	1 508	3 346
1964-65	35 717	170 963	20 819	227 449	87 315	193 371	25 770	306 456	1 472	3 412
1965-66	43 585	192 732	21 123	257 441	92 007	212 785	25 575	330 367	(f) 1 645	(f) 3 887
1966-67	51 376	209 456	20 311	281 143	88 834	224 975	25 680	339 490	1 684	4 085
1967-68	45 024	220 065	20 590	285 679	76 888	233 694	26 941	337 524	1 676	4 102
1968-69	37 509	241 398	21 051	299 958	102 061	265 476	25 825	393 362	1 795	4 645
1969-70	46 998	257 441	20 551	324 989	143 470	286 083	26 287	455 840	1 759	5 574
1970-71	45 719	269 022	19 777	334 519	143 198	277 669	27 103	447 970	1 639	5 338
1971-72	39 749	281 576	20 622	341 947	178 950	302 608	29 374	510 932	1 754	5 937
1972-73	45 045	289 862	21 238	356 145	218 712	320 910	30 626	570 247	1 788	7 239
1973-74	69 277	357 805	24 760	451 843	259 745	404 382	34 566	698 692	1 631	7 225
1974-75	100 616	402 081	26 850	529 547	226 154	379 933	31 699	637 786	1 611	6 820
1975-76	76 262	503 497	27 882	607 641	250 580	441 391	36 280	728 251	1 536	6 733
1976-77	94 622	564 231	30 909	689 762	338 657	485 850	35 160	859 667	1 592	7 258
1977-78	115 778	594 793	39 388	749 960	381 942	594 441	38 206	1 014 589	1 528	6 992
1978-79	140 652	621 548	74 578	r 836 829	513 286	627 186	39 727	1 180 199	n.a.	n.a.
1979-80	179 780	935 584	53 481	1 168 845	646 827	r 772 531	32 141	r 1 451 499	n.a.	n.a.
1980-81	172 456	973 685	60 922	1 207 063	658 013	r 837 042	45 171	r 1 540 226	n.a.	n.a.
1981-82	166 032	1 031 330	61 187	1 258 548	647 617	879 421	47 525	1 574 562	n.a.	n.a.
1982-83	179 814	n.y.a.	n.y.a.	n.y.a.	773 044	n.y.a.	n.y.a.	n.y.a.	n.a.	n.a.

(a) Data for 1979-80 onwards are not directly comparable with data for previous years because of revisions to estimating procedures to take account of inadequate documentation available for interstate imports by sea.

(b) Data for 1978-79 onwards are not directly comparable with data for previous years. From 1 July 1978 overseas export figures relate to all goods leaving Tasmania for overseas countries. Prior to that date export figures relate to only goods leaving Tasmania for overseas countries for which documents had been lodged with customs in Tasmania.

(c) In this section each vessel is recorded as an entry at the first Tasmanian port of call only; intrastate movements are excluded.

(d) Collection discontinued until 1922-23.

(e) Not collected before 1949-50.

(f) From 1966-67 not comparable with previous years; details are now confined to vessels of over 200 registered net tons engaged solely in trade.

(Chapter 17)

## Overseas and Interstate Exports of Selected Commodities, Tasmania

Year	Butter (incl. butter oil)		Fresh fruit— apples and pears		Meat		Cheese		Wool, greasy (a)	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000
1945-46	1 293	406	66 820	1 894	186	34	612	112	4 113	1 438
1946-47	1 340	688	19 908	1 028	312	83	993	180	5 275	2 706
1947-48	1 926	798	55 565	4 204	282	44	273	66	4 446	4 206
1948-49	2 475	1 268	31 481	2 366	789	122	181	41	6 365	6 758
1949-50	2 179	1 278	56 911	4 348	1 151	369	113	29	4 128	6 202
1950-51	1 958	1 173	64 841	6 828	915	302	63	17	5 446	18 688
1951-52	2 239	1 266	56 627	7 410	1 103	475	120	44	6 689	9 366
1952-53	2 397	1 802	77 288	11 578	1 753	818	39	18	7 643	12 030
1953-54	2 043	1 600	77 652	10 135	658	349	39	18	7 018	11 314
1954-55	3 944	3 026	72 112	8 950	1 676	814	73	39	8 011	12 190
1955-56	4 988	3 463	92 569	11 498	2 470	1 076	36	23	8 387	11 140
1956-57	6 101	3 452	58 836	7 936	2 074	883	102	73	9 392	16 198
1957-58	5 939	3 420	96 260	14 664	2 996	1 190	101	45	10 731	14 260
1958-59	7 065	4 828	87 781	11 338	5 469	2 415	69	51	11 415	12 106
1959-60	7 864	5 390	80 683	9 490	9 225	3 801	90	64	12 689	15 254
1960-61	5 419	3 298	92 730	11 226	6 896	3 212	60	47	11 068	12 560
1961-62	7 572	3 942	122 417	15 572	7 754	3 250	121	50	12 341	14 206
1962-63	8 597	4 368	108 438	17 508	9 933	4 737	578	269	11 919	15 338
1963-64	8 315	4 372	135 205	19 454	11 018	5 505	895	328	11 378	17 604
1964-65	10 374	5 914	99 410	14 260	12 881	6 645	1 707	761	13 756	16 593
1965-66	8 878	5 214	134 482	20 651	12 749	7 038	2 887	1 493	15 442	20 155
1966-67	9 140	5 259	96 085	11 872	13 727	7 939	3 530	1 642	16 238	20 373
1967-68	8 992	5 107	115 873	14 647	11 345	7 042	4 190	1 854	13 994	15 041
1968-69	9 243	5 129	96 242	13 154	12 910	7 989	1 930	884	15 798	18 592
1969-70	12 611	6 950	109 382	14 905	17 084	11 774	7 267	2 957	16 512	17 821
1970-71	10 664	5 954	96 670	13 474	15 755	10 706	6 259	2 589	17 145	14 350
1971-72	9 829	8 067	74 848	11 092	21 463	14 161	6 816	3 875	20 413	17 180
1972-73	7 437	6 104	84 066	11 566	23 061	20 368	6 656	4 085	17 735	34 579
1973-74	8 269	6 441	92 116	16 458	22 167	22 507	7 730	5 930	16 963	38 319
1974-75	5 012	4 460	57 473	10 261	18 456	12 237	10 386	7 922	15 947	26 640
1975-76	9 720	7 527	47 114	8 756	20 883	17 192	9 026	7 633	17 435	31 232
1976-77	4 363	3 851	24 847	5 732	22 951	20 281	14 552	12 317	16 204	33 685
1977-78	6 248	5 941	42 257	11 092	20 984	21 557	15 222	14 409	r 16 390	r 36 503
1978-79	2 561	3 146	40 405	11 794	24 569	37 240	16 516	18 247	16 306	38 756
1979-80	2 871	4 343	45 467	13 828	21 104	41 670	12 188	r 17 127	13 213	36 630
1980-81	1 510	2 703	39 932	12 467	19 718	35 890	r 13 302	r 22 414	16 356	48 422
1981-82	413	867	49 941	19 300	23 688	37 544	13 782	25 827	15 698	48 000

(Chapter 17)

## Overseas and Interstate Exports of Selected Commodities, Tasmania

Year	Sheep skins (with and without wool)		Textile yarn and fabrics	Refined zinc		Ores and concentrates	Timber (dressed and undressed)	
	Quantity	Value		Quantity	Value		Quantity	Value
	tonnes	\$'000		tonnes	\$'000		m <sup>3</sup>	\$'000
1945-46	1 890	326	4 599	75 454	4 214	1 668	73 206	1 132
1946-47	1 811	480	4 607	80 378	4 674	2 298	75 344	1 228
1947-48	963	452	5 681	66 411	4 906	3 074	96 188	1 584
1948-49	1 205	564	6 688	78 667	8 832	3 832	116 094	2 104
1949-50	1 500	816	5 580	81 999	9 964	4 076	146 625	2 930
1950-51	1 014	1 688	9 266	80 836	15 054	5 704	135 668	3 230
1951-52	1 434	1 232	7 498	77 090	18 606	11 714	134 604	4 428
1952-53	1 512	1 020	11 572	91 557	19 342	9 722	122 230	5 112
1953-54	1 333	1 098	13 552	97 593	17 222	8 544	135 751	6 700
1954-55	2 230	1 590	12 476	87 746	16 574	8 138	147 389	7 156
1955-56	1 873	1 356	14 674	100 611	19 888	10 836	140 938	6 570
1956-57	2 122	1 796	15 766	105 314	19 662	10 700	146 502	6 874
1957-58	2 138	1 674	16 112	105 541	18 190	8 088	132 242	4 616
1958-59	2 565	1 288	14 166	116 271	20 054	4 824	153 378	6 844
1959-60	3 216	2 078	17 524	115 680	22 922	5 952	177 931	8 952
1960-61	3 071	1 786	19 188	109 664	21 020	6 760	149 657	9 554
1961-62	3 050	1 892	21 278	133 012	23 680	6 030	134 033	8 588
1962-63	2 885	1 904	19 842	136 302	23 778	6 338	142 979	9 858
1963-64	3 359	2 844	21 918	134 201	27 910	9 102	168 480	11 176
1964-65	2 676	1 953	24 139	141 263	37 327	9 579	189 832	12 811
1965-66	3 268	2 465	24 077	137 257	38 331	11 302	174 297	12 145
1966-67	3 402	2 456	24 102	155 273	41 249	12 560	187 474	13 672
1967-68	2 722	1 369	25 487	120 312	33 106	17 816	183 817	13 492
1968-69	3 988	2 148	27 563	139 479	34 006	44 018	194 936	15 329
1969-70	3 236	1 790	27 784	163 847	42 625	63 478	207 242	16 238

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## Overseas and Interstate Exports of Selected Commodities, Tasmania—continued

Year	Sheep skins (with and without wool)		Textile yarn and fabrics	Refined zinc		Ores and concentrates	Timber (dressed and undressed)	
	Quantity	Value	Value	Quantity	Value	Value	Quantity	Value
	tonnes	\$'000	\$'000	tonnes	\$'000	\$'000	m <sup>3</sup>	\$'000
1970-71 .....	3 710	1 684	28 425	142 755	38 163	81 604	200 583	17 201
1971-72 .....	3 765	1 799	29 938	194 259	55 149	88 777	202 331	17 385
1972-73 .....	3 618	3 280	31 680	208 349	63 707	87 543	224 828	27 970
1973-74 .....	2 303	2 926	41 174	190 293	77 143	94 381	270 248	22 556
1974-75 .....	2 816	2 258	31 454	139 253	74 298	91 240	213 428	30 636
1975-76 .....	2 943	2 413	41 656	138 243	74 926	92 588	238 440	25 867
1976-77 .....	2 334	2 765	35 811	162 001	98 318	144 947	313 227	37 083
1977-78 .....	2 565	3 565	33 285	167 870	87 129	164 014	260 738	38 282
1978-79 .....	2 504	3 708	43 815	r 214 242	122 263	202 415	238 145	38 609
1979-80 .....	2 683	5 417	37 184	185 327	127 264	248 942	291 453	88 238
1980-81 .....	2 330	3 231	45 047	194 115	135 276	n.p.	265 488	85 254
1981-82 .....	2 713	3 395	46 095	199 774	162 700	n.p.	255 366	82 206

(a) Excludes greasy wool on exported skins.

(Chapter 17)

## Motor Vehicle Registrations, Tasmania (a)

Year	Motor vehicles on the register at end of year					New motor vehicles registered during year			
	Motor cars and station wagons		Commercial vehicles ( <sup>'000</sup> )	Motor cycles ( <sup>'000</sup> )	Total ( <sup>'000</sup> )	Motor cars and station wagons	Commercial vehicles	Motor cycles	Total
	Number ( <sup>'000</sup> )	Persons per vehicle registered							
1924-25 .....	5.8	36.9	(b) 0.8	2.7	9.3	n.a.	n.a.	n.a.	n.a.
1929-30 .....	12.5	17.6	(c) 2.2	4.8	19.5	1 627	(c) 552	939	3 118
1934-35 .....	12.9	17.8	3.0	3.9	19.8	982	422	171	1 575
1939-40 .....	17.6	13.6	5.2	3.4	26.2	1 400	540	176	2 116
1949-50 .....	25.3	10.9	12.9	4.9	43.2	3 311	1 565	886	5 762
1950-51 .....	28.8	9.9	15.1	5.3	49.2	4 187	2 319	960	7 466
1951-52 .....	32.5	9.1	16.8	5.7	55.1	4 267	2 073	938	7 278
1952-53 .....	35.4	8.6	19.4	5.7	60.5	3 368	1 724	474	5 566
1953-54 .....	40.0	7.7	19.7	5.6	65.4	4 178	1 896	450	7 064
1954-55 .....	44.9	7.0	21.5	5.3	71.7	5 738	2 285	417	8 440
1955-56 .....	48.0	6.6	21.9	4.8	74.7	5 457	2 179	332	7 968
1956-57 .....	51.7	6.3	22.6	4.4	78.6	5 309	1 988	340	7 637
1957-58 .....	55.9	6.0	23.9	4.0	83.8	5 337	1 944	225	7 506
1958-59 .....	59.1	5.7	25.0	3.6	87.7	5 362	2 113	176	7 651
1959-60 .....	63.7	5.4	26.4	3.1	93.2	6 527	2 115	96	8 738
1960-61 .....	68.1	5.1	26.7	2.6	97.4	6 723	2 058	61	8 842
1961-62 .....	72.8	4.9	27.4	2.4	102.6	6 931	1 778	59	8 768
1962-63 .....	77.9	4.6	27.5	1.9	107.3	9 003	1 986	52	11 041
1963-64 .....	84.4	4.3	28.0	1.7	114.1	10 268	2 343	53	12 664
1964-65 .....	91.3	4.0	28.9	1.5	121.7	10 522	2 389	69	12 980
1965-66 .....	96.8	3.8	29.7	1.5	128.0	10 133	2 878	207	13 218
1966-67 .....	101.7	3.7	30.2	1.6	133.5	10 390	2 611	380	13 381
1967-68 .....	107.7	3.5	31.1	2.2	141.0	11 738	2 412	751	14 901
1968-69 .....	113.7	3.4	32.2	2.8	148.7	10 845	2 529	781	14 155
1969-70 .....	118.6	3.3	32.6	3.1	154.3	11 399	2 456	799	14 654
1970-71 .....	124.9	3.1	32.9	3.5	161.3	11 792	2 550	794	15 136
1971-72 .....	130.2	3.0	33.8	3.8	167.8	11 961	2 492	978	15 431
1972-73 .....	135.4	2.9	34.6	4.5	174.5	12 970	2 813	1 343	17 126
1973-74 .....	141.2	2.8	35.3	6.1	182.6	13 674	2 846	2 600	19 120
1974-75 .....	150.3	2.7	36.6	7.4	194.3	16 097	3 980	2 749	22 826
1975-76 .....	156.9	2.6	39.1	6.8	202.8	14 410	3 971	1 831	20 212
1976-77 .....	162.7	2.5	40.5	6.2	209.4	14 520	4 260	1 428	20 208
1977-78 .....	171.9	2.4	41.2	5.0	218.1	13 884	4 170	972	19 026
1978-79 .....	178.8	r 2.4	42.9	4.8	226.6	13 928	3 401	892	18 221
1979-80 .....	177.2	r 2.4	47.5	4.7	229.5	13 333	3 454	1 089	17 876
1980-81 .....	r 183.5	2.3	r 49.0	r 4.9	r 237.4	13 563	3 444	1 278	18 285
1981-82 .....	r 186.5	2.3	r 50.5	r 5.1	r 242.1	12 210	3 302	1 110	16 622
1982-83 .....	191.0	2.3	52.5	5.8	249.3	11 279	3 209	990	15 478

(a) Includes State Government and Commonwealth Government-owned vehicles but excludes those belonging to the Defence Services.

(b) Trucks only.

(c) From 1929-30 includes trucks, utilities, panel vans and omnibuses.

# STATISTICAL SUMMARY

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(Chapter 17)

## Motor Vehicles on Register and Traffic Accidents, Tasmania

Year	Motor vehicles on the register at end of year (a)		Traffic accidents involving casualties					
	Number ('000)	Persons per vehicle registered	Accidents		Persons killed		Persons injured	
			Number	Per 10 000 vehicles registered (b)	Number	Per 10 000 vehicles registered (b)	Number	Per 10 000 vehicles registered (b)
1949-50	43.2	6.4	969	242	64	16.0	1 154	288
1954-55	71.7	4.4	864	127	57	8.3	1 111	163
1959-60	93.2	3.7	743	82	79	8.7	1 004	111
1960-61	97.4	3.6	844	89	75	7.9	1 157	121
1961-62	102.6	3.5	872	87	72	7.2	1 207	121
1962-63	107.3	3.4	919	87	67	6.4	1 354	129
1963-64	114.1	3.2	1 118	101	80	7.2	1 656	150
1964-65	121.7	3.0	1 180	100	97	8.2	1 692	143
1965-66	128.0	2.9	1 291	103	88	7.0	1 955	157
1966-67	133.5	2.8	1 356	104	102	7.8	2 081	159
1967-68	141.0	2.7	1 268	92	112	8.2	1 990	145
1968-69	148.7	2.6	1 400	97	122	8.4	2 228	154
1969-70	154.3	2.5	1 413	93	122	8.0	2 268	150
1970-71	161.3	2.4	1 396	89	124	7.9	2 031	129
1971-72	167.8	2.3	1 371	83	118	7.2	1 984	120
1972-73	174.5	2.3	1 423	83	83	4.8	2 052	119
1973-74	182.6	2.2	1 454	81	126	7.0	2 046	114
1974-75	194.3	2.1	1 466	77	120	6.3	2 061	108
1975-76	202.8	2.0	1 502	74	107	5.3	2 160	107
1976-77	209.4	2.0	1 606	77	103	4.9	2 314	110
1977-78	218.1	1.9	1 674	78	118	5.5	2 402	112
1978-79	226.6	r 1.9	1 537	69	98	4.4	2 113	95
1979-80	229.5	1.8	1 510	r 66	77	r 3.4	2 140	r 94
1980-81	r 237.4	1.8	1 634	r 70	120	5.1	2 186	r 94
1981-82	r 242.1	r 1.8	1 532	r 64	114	r 4.8	2 209	r 92
1982-83	249.3	1.7	1 114	46	73	3.0	1 524	62

(a) Includes cars, commercial vehicles, motor cycles and Commonwealth-owned vehicles other than Defence Services' vehicles.

(b) Based on average number of motor vehicles (including motor cycles) on the register.

(Chapter 17)

## Metropolitan Transport Trust Passenger Services, Tasmania (a)

Year	Route kilometres open for traffic	Hobart and Launceston services				Revenue (b)	Expenditure (c)
		Hobart		Launceston			
		Vehicle kilometres	Passenger journeys	Vehicle kilometres	Passenger journeys		
		daily average	daily average	daily average	daily average	\$'000	\$'000
1955-56	121	10 602	50 028	4 060	18 006	1 304	1 690
1960-61	198	16 964	49 946	5 058	17 462	1 997	2 586
1961-62	203	17 022	48 994	5 055	17 217	1 955	2 629
1962-63	208	16 732	48 051	4 736	16 279	1 905	2 537
1963-64	222	17 537	47 554	4 775	15 731	1 882	2 584
1964-65	224	17 566	45 985	4 598	15 183	1 829	2 606
1965-66	243	17 239	43 383	4 760	14 767	1 964	2 749
1966-67	248	17 323	42 967	4 843	14 728	2 124	3 008
1967-68	259	17 408	41 803	4 947	13 953	2 158	3 122
1968-69	286	17 745	40 675	4 730	13 365	2 270	3 250
1969-70	290	17 886	39 932	4 801	13 018	2 332	3 358
1970-71	290	18 055	40 058	4 633	12 521	2 321	3 741
1971-72	291	17 703	37 584	4 585	11 708	2 639	3 949
1972-73	308	17 106	36 572	4 530	11 397	2 659	4 333
1973-74	314	17 585	38 027	4 604	11 988	2 751	5 283
1974-75	364	19 031	40 791	4 650	12 055	2 916	8 299
1975-76	357	19 850	40 646	4 704	11 969	3 000	8 084
1976-77	358	20 791	39 507	4 219	11 283	2 862	8 945
1977-78	365	21 405	39 314	4 269	10 767	3 547	10 151
1978-79	366	20 685	34 870	4 148	9 552	4 186	10 672
1979-80	368	20 333	34 384	4 345	9 515	4 183	11 300
1980-81	387	21 551	34 161	4 306	9 368	4 896	13 458
1981-82 (d)	395	20 922	28 803	4 175	7 836	5 625	14 524
1982-83	400	20 871	29 107	4 015	7 762	5 710	15 453

(a) Includes tram, omnibus and trolley-bus services originally under municipal control but taken over by Metropolitan Transport Trust on 1.7.55. Trams ceased operating: Hobart 21.10.60; Launceston 13.12.52.

(b) Prior to 1955-56 includes government grants; see note (a) above.

(c) Includes interest, redemption and depreciation.

(d) The method used for calculating passengers changed after a change in ticketing procedures revealed inaccuracies.

(Chapter 17)

## Postal Services, Tasmania

Year	Letters and postcards	Mail posted in Tasmania or received from overseas		Registered articles
		Newspapers and packets	Parcels	
	'000	'000	'000	
1929-30 .....	39 956	7 128	198	307
1939-40 .....	33 874	5 525	132	314
1944-45 .....	37 804	5 885	350	621
1949-50 .....	50 038	8 440	368	674
1954-55 .....	42 999	9 107	268	625
1959-60 .....	43 020	9 629	233	456
1960-61 .....	43 242	9 432	231	404
1961-62 .....	42 603	9 714	242	390
1962-63 .....	45 202	9 183	237	379
1963-64 .....	47 452	9 340	232	371
1964-65 .....	49 108	9 549	263	371
1965-66 .....	51 710	10 309	288	375
1966-67 .....	55 594	10 531	302	379
1967-68 .....	55 273	10 141	303	349
1968-69 .....	56 516	9 425	282	325
1969-70 .....	58 824	8 953	300	312
1970-71 .....	57 916	8 640	353	313
1971-72 .....	54 780	6 773	352	268
1972-73 .....		63 187	358	228
1973-74 .....		63 272	289	203
1974-75 .....		59 644	308	193
1975-76 .....	44 829	5 528	220	132
1976-77 .....	45 406	5 627	310	126
1977-78 .....	48 690	7 569	342	124
1978-79 .....	51 828	12 252	379	121
1979-80 .....	53 902	10 962	444	119
1980-81 .....	57 204	6 628	544	127
1981-82 .....	51 503	5 773	543	125
1982-83 .....	49 603	5 986	548	116

(Chapter 17)

## Telecommunication, Radiocommunication, Broadcasting and Television, Tasmania

Year	Telegrams			Telephones		Radiocommunication, broadcasting and television stations		
	Despatched to and received from other countries	Despatched to places within Australia	Telephone exchanges	Telephone services connected at end of period		Radio- communi- cation	Broad- casting	Tele- vision
				Lines	Instru- ments			
	'000	'000	no.	'000	'000	no.	no.	no.
1929-30 .....	19	455	360	12	15	20	3	..
1939-40 .....	16	471	357	15	19	25	11	..
1944-45 .....	30	826	354	17	22	22	11	..
1949-50 .....	36	952	370	23	31	198	11	..
1954-55 .....	41	648	390	34	46	434	12	..
1959-60 .....	43	537	391	47	63	882	12	2
1964-65 .....	52	550	365	59	82	2 574	12	4
1965-66 .....	60	582	349	62	86	2 951	12	4
1966-67 .....	53	621	331	65	89	3 561	12	4
1967-68 .....	(a) 21	575	312	67	93	3 856	12	4
1968-69 .....	24	562	288	70	98	4 377	12	4
1969-70 .....	24	542	273	75	105	4 994	12	4
1970-71 .....	36	499	257	78	114	5 499	12	4
1971-72 .....	36	458	238	80	113	5 892	12	5
1972-73 .....		473	230	85	118	6 390	12	5
1973-74 .....		472	224	90	127	6 570	12	5
1974-75 .....		424	212	96	133	7 347	12	5
1975-76 .....		356	206	100	140	7 915	12	5
1976-77 .....		298	198	105	146	8 687	15	5
1977-78 .....		242	197	112	155	(b) r 15 612	15	5
1978-79 .....		178	196	118	164	r 15 008	15	5
1979-80 .....		135	196	125	174	r 15 383	16	5
1980-81 .....		122	197	133	202	r 13 746	r 17	5
1981-82 .....		107	197	139	192	r 13 413	r 17	5
1982-83 .....		91	197	145	212	21 204	17	5

(a) From 1967-68 excludes telegrams received, details of which are no longer available.

(b) Includes licensed Citizens Band Radio Service operators from 1977-78.



(Chapter 18)

Fire, Marine and General Insurance: Expenditure on Claims, Tasmania  
(\$'000)

Year	Claims	Year	Claims
1939-40 .....	357	1970-71 .....	13 214
1944-45 .....	357	1971-72 .....	15 279
1949-50 .....	942	1972-73 .....	18 249
1954-55 .....	2 743	1973-74 .....	23 507
1959-60 .....	5 404	1974-75 .....	29 979
1964-65 .....	7 854	1975-76 .....	29 952
1965-66 .....	9 153	1976-77 .....	42 010
1966-67 .....	16 158	1977-78 .....	50 279
1967-68 .....	16 890	1978-79 .....	55 373
1968-69 .....	10 865	1979-80 .....	60 244
1969-70 .....	12 285	1980-81 .....	75 036

(Chapter 18)

Banking, Tasmania  
(\$'000)

Year	Trading banks (including Commonwealth Trading Bank) (a)		Savings banks (b)	Depositors' balances at end of year	Year	Trading banks (including Commonwealth Trading Bank) (a)		Savings banks (b)	Depositors' balances at end of year
	Deposits	Advances				Deposits	Advances		
1935-36 .....				13 636	1959-60 .....	79 574	45 948	31 000	92 712
1936-37 .....				14 430	1960-61 .....	76 454	48 010	32 600	94 776
1937-38 .....				15 384	1961-62 .....	78 952	49 340	32 080	102 460
1938-39 .....				16 792	1962-63 .....	83 178	53 176	35 068	112 856
1939-40 .....				17 036	1963-64 .....	86 210	55 122	37 062	124 770
1940-41 .....	n.a.	n.a.	n.a.	17 882	1964-65 .....	94 604	54 176	41 340	135 736
1941-42 .....				18 944	1965-66 .....	102 507	55 214	43 105	148 401
1942-43 .....				22 348	1966-67 .....	112 091	60 460	47 103	167 106
1943-44 .....				28 426	1967-68 .....	117 811	69 297	51 222	177 827
1944-45 .....				33 828	1968-69 .....	124 473	72 394	55 896	190 043
1945-46 .....	34 560	7 346	5 778	40 894	1969-70 .....	131 501	77 603	61 173	199 790
1946-47 .....	35 504	10 168	6 748	41 712	1970-71 .....	133 587	86 976	64 177	217 663
1947-48 .....	37 360	14 954	7 894	43 144	1971-72 .....	135 099	88 098	69 970	242 856
1948-49 .....	39 620	20 084	9 398	44 826	1972-73 .....	159 141	99 192	85 291	288 986
1949-50 .....	44 114	22 834	11 210	48 544	1973-74 .....	207 040	121 077	103 041	328 029
1950-51 .....	53 444	26 636	14 740	54 310	1974-75 .....	229 851	137 189	119 447	382 326
1951-52 .....	61 474	33 378	17 712	60 238	1975-76 .....	277 377	157 951	150 536	430 618
1952-53 .....	58 270	33 440	17 700	64 156	1976-77 .....	348 613	207 635	179 932	477 134
1953-54 .....	62 286	37 800	19 876	67 894	1977-78 .....	375 773	250 144	193 310	530 457
1954-55 .....	65 826	43 670	21 432	71 618	1978-79 .....	415 180	300 811	220 074	587 755
1955-56 .....	68 562	44 582	23 242	74 422	1979-80 .....	425 910	345 930	256 249	642 129
1956-57 .....	72 976	40 406	25 200	77 518	1980-81 .....	445 257	394 596	287 683	698 917
1957-58 .....	73 736	41 360	25 800	80 482	1981-82 .....	532 364	432 599	318 147	759 111
1958-59 .....	75 218	44 828	27 600	84 924					

(a) Average of weekly figures.

(b) Commonwealth, trustee and private. Private savings commenced operations in Tasmania as follows: ANZ, September 1961; National, May 1962; CBA, July 1962; CBC, March 1963; and Bank of Adelaide, November 1970.

(c) Excludes debits to Government accounts at Hobart City branches.

(Chapter 18)

**Instalment Credit for Retail Sales, Tasmania (a)**  
(S'000)

Year	Amount financed during period (b)						Balances outstanding at end of period	
	Motor vehicles (c)		Household and personal goods		Total all goods		Type of business	
	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses
	Finance businesses	Other businesses	Finance businesses	Other businesses	Finance businesses	Other businesses	Finance businesses	Other businesses
1965-66 .....	18 017	400	11 126	—	29 543	—	37 495	7 645
1966-67 .....	19 025	422	11 160	—	30 607	—	38 777	7 050
1967-68 .....	21 909	430	12 058	—	34 397	—	43 141	6 457
1968-69 .....	21 001	821	13 751	—	35 573	—	44 205	6 826
1969-70 .....	23 353	925	13 816	—	38 094	—	46 537	7 317
1970-71 .....	25 485	1 215	13 705	—	40 405	—	50 453	7 293
1971-72 .....	28 240	1 117	13 511	—	42 868	—	54 463	7 097
1972-73 .....	32 695	616	14 579	—	47 890	—	60 860	6 497
1973-74 .....	32 278	457	3 394	5 489	35 672	5 946	51 512	5 621
1974-75 .....	40 409	371	4 028	5 753	44 437	6 124	63 544	4 352
1975-76 .....	45 612	282	6 819	5 752	52 431	6 034	78 038	4 371
1976-77 .....	54 738	175	7 465	5 951	62 203	6 125	95 463	4 137
1977-78 .....	54 967	—	6 163	5 063	61 130	5 063	104 029	3 117
1978-79 .....	48 714	—	6 761	2 753	55 475	2 753	95 716	1 486
1979-80 .....	39 814	—	7 116	1 048	46 930	1 048	86 164	1 495
1980-81 .....	37 286	—	6 969	1 142	44 255	1 142	80 220	1 580
1981-82 .....	35 388	—	8 873	1 661	44 261	1 661	79 132	2 072

(a) A break in continuity of the series occurs from 1973-74. The classification for the pre-1973-74 categories 'retail businesses' and 'non-retail businesses' differs from the subsequent categories 'finance businesses' and 'other businesses' mainly in the treatment of incorporated finance subsidiaries of retailers. These were formerly included in the category 'retail businesses' but are subsequently covered in 'finance businesses'.

(b) Includes time payment, budget account, and personal loan schemes associated primarily with financing of retail sales of goods. However, it excludes the hiring charges, interest and insurance costs associated with these types of contracts.

(c) Includes new and used cars, boats, caravans, trailers and motor parts and accessories but excludes commercial type vehicles.

## Appendix B

### CHRONOLOGY

#### The Year 1983

##### *January*

Tasmania experienced a death-free Christmas and New Year holiday period on the roads. 85 conservationists stationed themselves on the Gordon River for the resumption of the Tasmanian Wilderness Society's protest against the Hydro-Electric Commission's dam. New drink-driving legislation reducing the permissible blood alcohol level for drivers from .08 to .05 and introducing random breath tests came into force. Conservationist leader Dr Bob Brown was elected to the House of Assembly on a countback following the resignation of Dr Norm Sanders. The State Government approved a \$1 million development loan to assist the Edgell division of Petersville Ltd to expand its fast-food processing plant at Ulverstone. Eight conservationists arrested at the Gordon-below-Franklin dam site were charged with obstructing police. The Shell Co. of Australia revealed that coal mining at Mt Nicholas in the north-east could be sustained for 40 years with between 400 000 and 600 000 tonnes of coal being mined each year. Another 42 anti-dam protesters including Opposition backbencher, Mr Andrew Lohrey were arrested whilst attempting to delay construction of the dam in the south-west. A \$1.7 million contract for the construction of eight steel fishing boats was awarded to Tasmanian Engineering Service Pty Ltd of Somerset. Tasmania's unemployment rate rose to 11.4 per cent. The Premier, Mr Gray, rejected \$500 million, offered by the Commonwealth Government, to delay construction of the Gordon-below-Franklin dam. A cabinet reshuffle, in the Tasmanian Government, resulted in Mr Groom taking over the Police and Emergency Services portfolio from Mr Bingham and Mr Pearsall taking over the Housing portfolio from Mr Braid. The Legislative Council amended the State Government's wage freeze legislation from 12 to six months and restricted its application to about 20 000 public servants. Victorian horse, Palomine, won the Hobart Cup.

##### *February*

Tasmania's biggest ever rally was held to protest against the damming of the Franklin River; an estimated 12 000 to 20 000 people attended. Police seized marijuana worth more than \$2 million from a plantation at Rhyndaston. Commonwealth Opposition leader, Mr Hawke, pledged to stop construction of the Gordon-below-Franklin power scheme and offered financial assistance to meet the State's energy needs to the year 2000 as well as alternative employment for the HEC workforce should the Labor Party win government on March 5. Launceston City Council voted to withdraw from the Tamar Regional Master Planning Authority. Almost 3 000 marijuana plants and \$40 000 worth of dried cannabis were discovered in a rainforest in the north-east. Former Governor of Tasmania (1963-1968), Sir Charles Gairdner, died at the age of 84. Police evicted 77 conservationists camped on the Lower Gordon River. Nifty Red won the \$42 500 Launceston Cup.

##### *March*

Tasmania had its most successful cricket season, one highlight being paceman Peter Clough's hat-trick in the final match against NSW. A major American company began negotiations to establish a computer hardware industry, employing 300 people in Tasmania. 'Green Day', a day designated by the Tasmanian Wilderness Society as a day of active protest, resulted in a record number of arrests (228) in the south-west. Four Tasmanian cricketers, Roger Woolley, David Boon, Stuart Saunders and Phil Blizzard,

were selected to represent Australia in Sri Lanka and Zimbabwe. Hobart experienced its driest summer for 85 years with only 41mm of rain falling from December to February; (average rainfall is 145mm). The Liberal Party was defeated by the Labor Party in the Federal election although Tasmania's five Liberal members of the House of Representatives were re-elected. Mr Fraser resigned as Leader of the Liberal Party and Mr Hawke was sworn in as Australia's new Prime Minister. John Walker of New Zealand became the first athlete to run a four minute mile in Tasmania. The Tasmanian Wilderness Society reduced its representation in the south-west in anticipation of the new Federal Labor Government honouring its commitment to stop the dam. Premier Gray was criticised by Liberal backbencher Mr Haros for refusing to negotiate with the Hawke Government over compensation for the dam and forcing a High Court battle. Lilydale residents voted to replace their municipal council with a Commission. The Tasmanian Government rejected the Federal Government's first formal approach for negotiations on the Gordon-below-Franklin dam. Farmers were pleased by the first decent rainfalls for many months. Mining exploration and development to be allowed in Tasmania's south-west conservation area, lifting a 4½ year moratorium on exploration in the area. The Prime Minister once again called on the Tasmanian Government to discuss a compensation package to replace the dam. Regulations under section 69 of the *National Parks and Wildlife Act 1975*, gazetted by the Federal Government, made any further work on the Gordon-below-Franklin dam illegal. Mr Gray was adamant that work on the dam would proceed although the Tasmanian Government would abide by the High Court decision if it went against them. The Prince and Princess of Wales began a two day visit to the State.

#### *April*

A Commonwealth writ, seeking an injunction to permanently stop work on the proposed Gordon-below-Franklin dam, and a Tasmanian writ seeking a declaration from the High Court that regulations gazetted under which the Commonwealth was acting were constitutionally invalid, were filed in the High Court. The Queensland Premier, Mr Bjelke-Petersen, stated that he would actively back Tasmania's state's rights campaign. A Tasmanian Full Court dismissed an appeal by police against a Hobart magistrate's decision that he had no jurisdiction to hear a trespass case against a protester arrested on the Kelly Basin Road, leaving doubtful 1 000 prosecutions. Police protection was given to Premier Gray following an alleged \$250 000 'contract' on his life. The Queensland Government's legal advisors worked in support of Tasmania in its High Court battle with Canberra. The sale of a quarter of Tasmania's wool clip was threatened by a four week old national shearers' strike. The leader of the State Opposition, Mr Wriedt, was suspended from parliament for 24 hours for refusing to retract remarks which he had directed at the Premier. The Day Light Saving Bill, to permanently entrench a five month period, was passed by the House of Assembly. Major retailers predicted that almost 1 000 new jobs would be created in Tasmania if shop trading hours were extended to allow Saturday trading. Legislation to widen the Commonwealth's constitutional basis for stopping the Gordon-below-Franklin dam was introduced into Federal Parliament. The use of RAAF aircraft for flights over the south-west dam site drew severe criticism from Australia's Chief of Defence Force Staff, Air Chief Marshal Sir Neville McNamara. Tasmania's striking shearers voted against returning to work, rejecting the union's Federal Executive's decision to end the five week national strike. Corner store proprietors strongly opposed any change to the shop-trading legislation.

#### *May*

The chairman of the Royal Hobart Hospital Board, Mr D. A. Kearney, resigned in protest at the State Government's handling of public hospitals. Major Tasmanian retailers were permitted to trade on Saturday afternoons in December only. The King Island Scheelite Mine shut down for four weeks after striking miners voted to extend their strike. Shearing began at a number of southern Tasmanian properties in defiance of bans imposed by striking shearers. An American company revealed plans for a 300 passenger, 50 car, high-speed catamaran to compete against the Empress of Australia on the Melbourne-Devonport route. The seven week strike by shearers over the use of wide combs ended in Tasmania. Charges against 1 300 Franklin River protesters were dropped

because of the cost to the Government and difficulties in proving the charges. State Cabinet approved a multi-million dollar recreational development at Prospect in Launceston including a \$4 000 000 roofed velodrome. The Department of Main Roads expecting to spend about \$21 million under the National Highway and Australian Bicentennial Road programs in 1983-84. Tasmania to receive \$7.5 million in 1983-84 (based on the State's proportion of the national population) to create an estimated 1 980 jobs in the first year of the Federal Government's new job-creation scheme. Thirty candidates contested Legislative Council seats in the electorates of Queenborough, Pembroke, Tamar and West Devon. Those elected were Mr Peter McKay, Pembroke; Mr Jeff Coates, Tamar; Mr John Stopp, Queenborough; Mr Hugh Hiscutt, West Devon. A warrant was issued for the arrest of former Launceston chartered accountant and financial adviser, Mr Colin Room. The charges included allegations of misappropriation, deception, false pretences and forgery.

### *June*

Workbans in protest at the cancellation of work experience training courses for student nurses, were imposed on the Launceston General Hospital by the Royal Australian Nurses Federation. The bans allowed only emergency and cancer admissions. The State Government announced its intention to introduce legislation to revoke or suspend the special licence under which Australian Paper Manufacturers operated in Tasmania, following the closure of their mills in the Huon and their inability to give proposals for permanent use of the forest resources. Mr Harry Braid was elected President of the Legislative Council. Legislation was introduced tying politicians' salary rises to those awarded to Tasmanian public servants. Sir Maurice Byers, QC, opened the Commonwealth's submission on the Gordon-below-Franklin dam case to the High Court. A move by the State Government to allow major retailers to trade on Saturday afternoon in December was rejected by the Legislative Council. More than 50 Tasmanian racing greyhounds died in one of the worst outbreaks of distemper the industry has known. The Brooker Highway extension, costing \$7 700 000, was opened by the Minister for Main Roads, Mr Braid. The Premier unveiled 20 new projects, costing \$143 million which could employ up to 1 200 men if the south-west dam was stopped. Tasmania's 54 members of parliament to get a 21 per cent pay rise of \$6 000, from 1 January 1984, following rejection of legislation in the Legislative Council. Plans were announced to set up a new development authority aimed at revitalising and expanding the Tasmanian economy; the Tasmanian Development Authority would replace the Department of Industrial Development and the Agricultural Bank. The HEC announced it would continue to build the Crotty Access Road regardless of the High Court decision. The lowest temperature yet recorded in Tasmania, -13°C, was registered at Tarraleah, Butler's Gorge and Shannon. Wilson's Huon Bakery and United Milk Tasmania were refused milk processing licences by the Tasmanian Dairy Industry Authority.

### *July*

The High Court ruled that the Gordon-below-Franklin dam would not go ahead in a landmark decision which represented a significant expansion of Federal powers. Simon Youl (18) of Symons Plains became the second Tasmanian to win a Wimbledon tennis Championship when he and Queenslander Mark Kratzmann took out the junior boys' doubles title. Alternative works to the Gordon-below-Franklin dam began, including Guilford-Hampshire and Cradle Mountain road links, the Mt Black deviation near Tullah, and the Lyell Highway 14 mile deviation. The Premier hinted that legislation for the proposed Henty-Anthony hydro scheme would be brought forward by about a year. Mr Gray put compensation for the Gordon-below-Franklin dam at \$1 000 000 a week until 1991. The Prime Minister planned a visit to the West Coast in the wake of the High Court decision. The Premier predicted the \$280 million King River scheme may be Tasmania's next hydro development after the \$180 million Henty-Anthony project. Mr Gray called for a combined push by non-Labor states for a referendum to restore the balance of power between the Commonwealth and the states. The State Government budget deficit for 1982-83 was slashed by about \$5.5 million (42 per cent). Aberfoyle Ltd announced it may have found a massive ore body near its Que River mine. University of New South Wales

physicists suggested Tasmania should begin planning for the introduction of large scale wind power technology. The State Government announced grants totalling \$26 000 to be paid towards the travel costs of State sporting teams and the development of sports and recreation facilities. The Premier disassociated himself from a campaign by Tasmanian Federal Members of Parliament to over-rule the High Court's decision on the Gordon-below-Franklin dam. The Federal Government committed \$23 585 000 compensation for job alternatives to the south-west dam. CSR found, as a result of two years' exploration, deposits of about 118 million tonnes of brown coal at Rosevale, near Westbury. A meeting called by Mr Salter MHA, Liberal member for Wilmot, at St Marys endorsed a motion asking the Government to establish a thermal power station in the Fingal Valley. Possum carcasses airfreighted from Tasmania as meat for human consumption were found on sale in Victoria. A full-scale investigation launched by the State Government resulted in charges being laid against a Deloraine furrier. Filling began of Lake Rosebery, the third reservoir in the Pieman river power development. A \$1 million upgrading programme was planned by the Devonport textile firm, Tootal Aust. Pty Ltd.

### *August*

The State Government decided to speed up work on access roads for the \$460 million Henty-Anthony and King River hydro power schemes because of the Federal Government's decision not to continue funding the Crotty Road construction. It also sought early approval for construction of the Henty-Anthony and King-Huxley-Newall power schemes. The State Government decided to use a 'loophole' in the HEC Act to bypass parliamentary approval for work on the access roads to the Henty-Anthony and King River power schemes. The HEC planned to recommend a 200MW coal-fired thermal power station as the major replacement for the Gordon-below-Franklin scheme. The Tasmanian retail industry predicted the loss of 700 jobs as a result of the \$11 wage increase granted by the chairman of the State Industrial Boards. Almost 1 000 West Coast miners went on strike at Rosebery and Renison. A major economic development package was created by the State Government to provide funds and opportunities for key industries and to boost employment prospects in Tasmania. A four engine Heron aircraft operated by Airlines of Tasmania crash-landed at Launceston Airport, after arriving from King Island with seven passengers. The big users of electricity will face paying the real costs of energy from new hydro schemes. Mr Ashton stated 'if the HEC was asked to build a scheme to supply a bulk user, the power would be charged at the total cost of production and supply'. An economic development package containing initiatives to reinforce the fishing, tourist, forestry and agricultural industries, funded by an additional \$20 million the State gained at the Premier's Conference, was to give Tasmania a significant change of direction, according to the Premier. The State Government asked the Federal Government to put a second ferry on the Melbourne-Devonport run for a trial period of two years. A report, compiled by an 11-man study team, recommended the restoration and development of Launceston's historic Duck Reach power station at a cost of \$10 million. Shell Australia told the Premier that it is ready, willing and more than able to develop its Fingal Valley coal reserves for use in a thermal power station. The \$9 million Cradle Mountain-West Coast road link appeared certain to get the go-ahead from Federal Cabinet as a south-west compensation item. The Premier, Mr Gray flew to the United States on a seven-day business trip in a bid to bring new business and investment to the State. The EZ mine complex at Rosebery stopped production indefinitely following a previous walkout by union members over the sacking of three workers. As part of a \$120 million program the Federal Government announced plans to spend \$4 million to construct 3 buildings in Tasmania to stimulate the building industry by developing new office space for Commonwealth departments. The Premier put the comprehensive, long-term south-west dam compensation at \$3 455 million. A 2000 year old Huon Pine tree at Warner's Landing on the Gordon River was vandalised. Australian Newsprint Mills Ltd at Boyer planned to spend \$2.4 million diversifying its operation by building a wood veneer plant and a new sawmill. Tasmania's four-day milk strike ended. The Premier proposed that an independent arbiter be appointed to settle compensation disputes between the State and the Commonwealth. The Prime Minister, Mr Hawke, began a two day visit to Tasmania.

### *September*

Mr Hawke was welcomed to Tasmania's West Coast by No Dam and ALP supporters. General Jones predicted Tasmanian pea growers' contracts were likely to be out by 50% with loss of income totalling \$750 000. Angry parents protested against the removal of books, including copies of the Bible from Winnaleah District High School library. The HEC formally recommended that the State Government build the Anthony and King River power schemes as Tasmania's next power developments. A Supreme Court Order was granted to the EZ Co. to restrain picketers at Rosebery from interfering with or obstructing the free flow of traffic in and out of the plant. Employees of Benders Transport Services who depend on the transportation of fertilizer and limestone produced at EZ, were asked to take annual leave because of the strike. The State Budget hit smokers with a 13 cent per packet increase and people using credit cards or making savings withdrawals with a 15 cent transaction tax. The Legislative Council took only 30 minutes to approve the \$549 million King and Anthony Power schemes. North Launceston won the NTFA premiership for the sixth time in eight years and Glenorchy won the TANFL grand final. Extradition proceedings against former Launceston businessman and accountant, Colin Room, began in a closed court. Aberfoyle Ltd retrenched 60 workers as a result of a cut-back of production. Superphosphate and aluminium phosphate was allowed to leave EZ's Risdon Plant after a meeting of unions. A \$3.35 million contract to build an international velodrome in Launceston was awarded to Trinity Projects and Mathews-Keating. It was reported the Tasmanian Parliamentary pension fund was in need of an injection of \$2 052 000 to remain solvent. EZ Co. employees ended their six week strike. Australia made sporting history by winning the America's Cup. The planned expansion of the Tootal's textile factory at Devonport was scrapped and part of its operation sold in a multi-million dollar takeover deal. A major dispute between the company and trade union leaders began again at EZ Co's west coast mines.

### *October*

Cathy Franks was crowned Miss Tasmania 1984. The State Government vetoed another attempt to set up a floating dry-dock for the Russian fishing fleet in Hobart. The Premier, Mr Gray, was rebuked by the Tasmanian Liberal Party for deciding to campaign in the Queensland State election with Premier Bjelke-Petersen. The Commonwealth scrapped five existing proposals for an Empress of Australia replacement and ruled out Federal subsidies for any extra passenger ferries on the Bass Strait run. The Australian National Line denied its Bass Strait ships could increase passenger-carrying capacity by 1 200 a week by concentrating less on freight services. The new Devonport \$6.5 million jet airport was officially opened. A Legislative Council Select Committee report recommended the formation of a greater Launceston by amalgamating the urban areas of five surrounding municipalities. The State Government abandoned plans to operate a charter passenger ship across Bass Strait after maritime unions insisted the ship be totally Australian manned. APPM announced plans to spend \$10 million on modernising operations at its Burnie mill. Tasmania's Simon Youl won the Australian Hardcourt Championship. A poll to determine ratepayers' views on the creation of a greater Launceston City was planned for the six Launceston municipalities involved. A log train mishap became Tasmania's fifth in six weeks. Opposition backbencher, Mr Lohrey, was suspended from Parliament for seven days. One of Tasmania's largest building companies, Australian Building Corporation Pty Ltd went into provisional liquidation.

### *November*

Hadley's Hotel was sold to a Hobart business group for an undisclosed price. Stand-downs in the building industry were expected to accelerate as a result of the Goliath cement works strike. CSR Ltd proposed a \$100 million development of its Rosevale coal deposits 25 kilometres west of Launceston to supply a coal fired thermal power station. The NTFA voted to invite the Deloraine and George Town football clubs to join the NTFA in the 1984 season on a three year trial basis. David Boon of Launceston became the first Tasmanian to score a double century (227 runs) since Tasmania was accepted into the Sheffield Shield competition. A Tasmanian jockey, Craig Hanson of Longford,

died after a three-horse fall at the Mowbray Racecourse. The Westbury Council decided not to support in principle the development of a coal-fired thermal power station in the municipality. Russian interests began negotiating with the Federal Government on a joint fishing venture off Tasmania, despite the State Government being opposed to such a venture. A \$2.5 million marijuana crop was seized near Beaconsfield.

### *December*

The Tamar Regional Master Planning Authority was concerned that the State Government had ruled out the Tamar Valley as a possible coal-fired power station site before a feasibility study had been conducted. A floating fish processing factory was planned for Triabunna possibly creating an extra 200 jobs for the East Coast. A \$3 million holiday village appeared certain to be built at Seven Mile Beach. The State Government allowed punters to lay bets on the Sydney-Hobart yacht race through the TAB. Three senior members of the Legislative Council were found guilty of contempt of Parliament by the Council's Privileges Committee. The greater Launceston proposal was rejected by four of the six municipalities involved in the referendum held to decide the issue. Conara Junction named as a possible site for a coal fired thermal power station. The township was recommended as the site after the completion of the Netz McClelland report. State Government backbencher, Gabriel Haros, was found guilty of two charges of false pretences. Two mainland companies involved in exploration and coal development joined forces to spend up to \$1 million evaluating black coal deposits at Woodbury. Stricter conditions for woodchipping were laid requiring woodchipping companies to make better use of their resources, reduce waste and pay greater attention to forest regeneration in harvested areas. City retail stores experienced record sales over the Christmas period. The America's Cup went on display at the Tasmanian Museum and Art Gallery. Only \$8 328 was invested with the TAB by punters hoping to pick the double (line honours and handicap winner) on the Sydney-Hobart yacht race. The State Government, despite opposition from Tasmanian Wilderness Society, began collecting a \$50 levy from rafters on the Franklin River. A new traffic regulation was introduced to allow for the granting of licences to people under 17 who drive wheelchairs. The State Government threatened to prevent rafters from using the Franklin River if they continued to ignore the \$50 levy. NSW cyclist, Ray Crowe won the Latrobe wheel. *Condor* won line honours in the Sydney-Hobart yacht race after *Nirvana* was disqualified after a protest, lodged by *Condor*, was upheld; *Challenge* won the race on corrected time. Geoffrey James Foot was named a Knight Bachelor in the Queen's New Year honours list. Tasmania's road toll, 70 for 1983, was the lowest in 20 years. The inflation rate for Hobart fell dramatically; figures for the 1983 December quarter showed that the inflation rate was 7.8 per cent compared with 10.3 per cent for the 1982 December quarter.



## PUBLICATION OF TASMANIAN STATISTICS

### HOW TO OBTAIN CURRENT PUBLICATIONS

#### General

The Tasmanian Office of the Australian Bureau of Statistics is located in the *Commonwealth Government Centre* at 188 *Collins St., Hobart*. Requests for statistical publications can be made by calling at this address; by phoning the Information Officer on *Hobart 209 409*; or by writing to the *Deputy Commonwealth Statistician, G.P.O. Box 66A, Hobart 7001*. Those requiring particular publications on a regular basis should ask to be placed on the publications mailing list.

Service to the public is not restricted to the distribution of publications. If no publication adequately covers the subject matter of the inquiry, then a special extraction of the data required may be undertaken if they are readily available from the basic records held in the office. The guide, *Catalogue of Publications* (1103.6), *Tasmanian Office*, 1983, includes descriptions of all Tasmanian Office publications together with a detailed subject index and is available free of charge.

#### Historical

Before the appointment of the first Government Statistician in Tasmania in 1867, statistics had been published in the official 'Blue Books' compiled by the Colonial Secretary during the period 1822-1855, and in volumes entitled *Statistics of Tasmania* after self-government was granted.

By the *Commonwealth and State Statistical Agreement Act* 1924, the Tasmanian Parliament ratified an agreement for the establishment of an office in Tasmania of the Australian Bureau of Statistics, such office to meet the statistical needs of the State Government; provision was made for the Deputy Commonwealth Statistician, a Federal Government officer, to hold, at the discretion of the State Government, the title of (State) Government Statistician. The first officer appointed in this way was L. F. Giblin, M.C., D.S.O., who had previously been the State Government Statistician. (It was not until the late 1950s that similar arrangements were made in the other Australian states.)

#### *Statistics from 1804*

In the Archives Office of Tasmania, the following series are available:

- (i) *Statistical Account of Van Diemen's Land or Tasmania, 1804 to 1854* compiled by Hugh M. Hull (Office of the Colonial Secretary).
- (ii) Official 'Blue Books' for the period 1822-1855.
- (iii) *Statistics of Tasmania*—annual publications from 1856 to 1922-23.
- (iv) *Statistics of the State of Tasmania*—annual publications commencing 1923-24 and continuing to 1967-68. (Copies of these volumes are held at the University Library, the State Library in Hobart, the Public Library in Launceston and the Tasmanian Office of the Australian Bureau of Statistics.) Although the bound volume entitled *Statistics of the State of Tasmania* has been discontinued as from the 1967-68 issue, the component parts are still published as separate bulletins.

Copies of publications listed under (i), (iii) and (iv) above, are available for inspection at the Tasmanian Office of the Bureau.

### Current Publications of the Tasmanian Office

The Tasmanian Office of the Australian Bureau of Statistics is engaged in a continuous publication program, the statistics appearing in either 'for sale' or 'not for sale' publications.

The 'not for sale' publications (publications available free of charge) can be further dissected into annual bulletins and press releases. The press releases are issued with a view to making the statistical information available as soon as possible after compilation. Bulletins contain greater detail than press releases, but because of time taken to compile and print are issued some time after the period to which they refer. The two principal 'for sale' publications issued by the Tasmanian Office of the Bureau are the *Tasmanian Year Book* and *Pocket Year Book of Tasmania*.

The following table lists all recent publications issued by the Tasmanian Office. A similar table is included on the back cover of each issue of the *Monthly Summary of Statistics* and all annual bulletins, showing the latest available issues and their dates of publication.

Publications of the Tasmanian Office of the Australian Bureau of Statistics (a)

<i>Cat. No.</i>	<i>Publication</i>
<i>General</i>	
1101.6	Index of Towns, Localities and Standard Area Codes <i>irr</i>
1103.6	Catalogue of Publications, Tasmanian Office <i>irr</i>
1301.6	Tasmanian Year Book (\$16.50; \$19.50 posted) <i>a</i>
1302.6	Pocket Year Book of Tasmania (\$3.00; \$3.70 posted) <i>a</i>
1303.6	Monthly Summary of Statistics <i>m</i>
1304.6	Compendium of Local Government Area Statistics <i>irr</i>
1305.6	Tasmania at a Glance <i>a</i>
1306.6	Major Economic Indicators <i>q</i>
<i>Demography and Social</i>	
2201.6	Census of Population and Housing 1981: Characteristics of Persons in Hobart Suburbs <i>irr</i>
2202.6	Census of Population and Housing 1981: Characteristics of Persons in Launceston Suburbs <i>irr</i>
2401.6	Census of Population and Housing 1981: Characteristics of the Population and Dwellings in Local Government Areas <i>irr</i>
3201.6	Estimated Population of Local Government Areas in Tasmania <i>a</i>
3202.6	Population and Vital Statistics <i>q</i>
3203.6	Age Distribution of the Estimated Resident Population in Local Government Areas <i>irr</i>
3301.6	Death, Causes of <i>a</i>
3302.6	Divorces <i>a</i>
4203.6	Tertiary Education <i>a</i>
4204.6	Government Schools <i>a</i>
4205.6	Non-government Schools <i>a</i>
4503.6	Prison Statistics <i>a</i>
4504.6	Police Statistics <i>a</i>
4505.6	Children's Court Statistics <i>a</i>
4506.6	Lower Court Statistics <i>a</i>
4507.6	Higher Court Statistics <i>a</i>
<i>Trade and Finance</i>	
5401.6	Interstate Trade <i>a</i>
5501.6	Local Government Finance (\$1.00; \$1.70 posted) <i>a</i>
5603.6	Friendly Societies, Report on <i>a</i>
<i>Labour, Wages and Prices</i>	
6102.6	Labour Statistics <i>a</i>
6301.6	Industrial Accident Statistics (\$1.00; \$1.70 posted) <i>a</i>
6401.6	Prices and Price Indexes <i>a</i>

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## Publications of the Tasmanian Office of the Australian Bureau of Statistics (a)—continued

<i>Cat. No.</i>	<i>Publication</i>
<i>Agriculture</i>	
7111.6	Principal Agricultural Commodities, (Preliminary) <i>a</i>
7221.6	Livestock and Livestock Products <i>a</i>
7321.6	Crops and Pastures <i>a</i>
7322.6	Fruit <i>a</i>
7411.6	Agricultural Land Use and Selected Inputs <i>a</i>
7501.6	Agricultural Commodities Produced, Value of <i>a</i>
7601.6	Household Fish Consumption and Non-Commercial Fishing Activities <i>irr</i>
<i>Manufacturing and Mining</i>	
8201.6	Census of Manufacturing Establishments, Summary of Operations by Industry Class <i>a</i>
8202.6	Census of Manufacturing Establishments, Details of Operations and Small Area Statistics (\$1.70; \$2.40 posted) <i>a</i>
8203.6	Sawmilling, Woodchipping, etc. Statistics <i>q</i>
8301.6	Miscellaneous Indicators of Production <i>m</i>
8401.6	Mining <i>a</i>
<i>Tourism, Retail Trade and Building</i>	
8603.6	Tourist Accommodation <i>q</i>
8622.6	Retail Establishments & Selected Service Establishments: Details of Operations by Industry Class <i>irr</i>
8623.6	Retail Establishments and Selected Service Establishments: Industry and Commodity Details for Statistical Retail Areas <i>irr</i>
8624.6	Retail Establishments and Selected Service Establishments: Hotels and Accommodation <i>irr</i>
8625.6	Retail Establishments and Selected Service Establishments: Commodity Sales and Service Takings <i>irr</i>
8626.6	Retail Establishments and Selected Service Establishments: Industry and Commodity Details by Size of Establishments <i>irr</i>
8780.6	Building and Related Statistics <i>a</i>
8731.6	Building Approvals <i>m</i>
8752.6	Building Activity <i>q</i>
8741.6	Number of New Dwelling Commencements as Notified by Approving Authorities <i>m</i>
<i>Transport</i>	
9301.6	Motor Vehicle Registrations <i>m</i>
9302.6	Motor Vehicle Census <i>irr</i>
9401.6	Road Traffic Accidents Involving Casualties <i>q</i>
9402.6	Road Traffic Accidents Involving Casualties <i>a</i>

(a) Publications are free of charge unless a price is shown. The name of each publication is followed by a symbol indicating the frequency of publication as follows: *m* - monthly, *q* - quarterly, *a* - annual, *irr* - irregular.

## TASMANIAN STATISTICS IN CENTRAL OFFICE PUBLICATIONS

Although publications of the Tasmanian Office of the Australian Bureau of Statistics make available statistics on many aspects of the State, there are some fields in which additional or more frequent information is available in publications of the Central Office.

## How to Obtain Central Office Publications

Central Office priced publications may be bought direct from the *Australian Government Publications and Inquiry Centres* at 113 London Circuit, Canberra or 162 Macquarie St., Hobart, or from the Tasmanian Office of the Australian Bureau of Statistics. A standing order may be placed with the *Australian Government Publishing*

Service, P.O. Box 84, Canberra, A.C.T. 2600, with whom a credit account may be arranged. In addition to publications for which a charge is made, there are other Central Office publications which may be obtained free of charge by 'phoning Canberra (062) 52 6627 or Hobart (002) 209 409 or by writing to Information Services, Australian Bureau of Statistics, P.O. Box 10, Belconnen, A.C.T. 2616.

#### **Subject Matter of Central Office Publications**

The fields of statistical inquiry covered in Central Office publications are very wide (about 270 different titles are issued annually) and the best way to obtain a guide to the material available is to write to: *The Australian Statistician*, P.O. Box 10, Belconnen, A.C.T. 2616 and ask for the booklet *Catalogue of Publications* (1101.0). Copies of this guide are also available at the Tasmanian Office of the Bureau. This free, comprehensive guide lists the publications of the Central Office and of the state offices; in addition, it contains a subject index to information covered by Central Office publications. Readers with interest in a particular field are invited to call at, or write to, the Tasmanian Office which is in a position to give advice on what publications are available.

## INDEX OF SPECIAL ARTICLES

Special articles are indexed to broad subject areas rather than to detailed items; e.g. those of an historical nature are indexed under the entry 'Historical Articles'. The index covers all *Year Books* up to and including this edition, and shows year of publication, chapter and page number.

### Aboriginals—

- Archaeology (Study of the Tasmanian Aborigine) ..... 1969 (3), pp. 69-72
- Prehistory of the Tasmanian Aborigines ..... 1981 (15), pp. 6-15
- Tasmanian Aboriginals and Their Struggle for Recognition (1876-1982) ..... 1982 (18), pp. 510-527
- Tasmanian Aboriginal Rock Carvings ..... 1971 (5), pp. 78-81
- The Aborigines ..... 1967 (1), pp. 6-10
- Wybalenna, The Tasmanian Aboriginal Settlement on Flinders Island ... 1973 (7), pp. 10-13
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- Apple Industry, Economic Aspects of the Tasmanian ..... 1973 (7), pp. 236-248
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- Centre for Regional Economic Analysis ..... 1982 (18), pp. 490-493
- Consumers Protection Council ..... 1972 (6), pp. 114, 115
- Convicts, The ..... 1967 (1), pp. 10-13
- Currency, Changeover to Decimal ..... 1969 (3), pp. 511-514
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- Dairying Industry in Tasmania, Diversification of ..... 1973 (7), pp. 249, 250
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- Educational Radio and Television in Tasmania ..... 1971 (5), pp. 410-412
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